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west virginia department of environmental protection

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Oil and Gas Conservation Commission  
601 57<sup>th</sup> Street, SE Charleston, WV 25304  
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Earl Ray Tomblin, Governor  
Barry K. Lay, Chairman  
dep.wv.gov

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA**

**IN THE MATTER OF THE REQUEST BY JAY-BEE  
OIL AND GAS, INC. FOR AN EXCEPTION TO RULE  
39 CSR 1.4.2 FOR THE DRILLING OF THE WELL  
IDENTIFIED AS THE LARRY 3U, API: 47-095-02334.  
JAY-BEE IS PROPOSING TO EXTEND THE  
LATERAL ON A PREVIOUSLY APPROVED LOCATION.  
THE LARRY 3U WELL IS TO BE LOCATED IN  
ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA.**

**DOCKET NO. 241-230  
ORDER NO. 2**

**REPORT OF THE COMMISSION AND ORDER**

This cause came before the Commission on July 27, 2016, at the Department of Environmental Protection, Charleston, West Virginia, after giving notice as required by law, at the request of Jay-Bee Oil & Gas, Inc. ("Jay-Bee"), seeking approval for an exception to W.Va. C.S.R. § 39-1-4.2 for the drilling of a proposed deep well, identified as Larry 3U (API #47-095-02334 ) (referred to hereinafter as the "Larry 3U"). Jay-Bee proposes to extend the lateral length of its horizontal well leg on a previously approved location. The request for a second, additional exception by Jay-Bee is an extension of the lateral leg bottom hole of its Larry 3U leg to 410 feet from the unit boundary line and to 1,957 feet of the bottom hole of Antero Resources Corporation's Rymer 4HD well, API No. 47-095-02273 ("Rymer 4HD" or "Antero Well"). Jay-Bee has requested approval from the Commission for this second, additional exception pursuant to W.Va. C.S.R. § 39-1-4.2.

Promoting a healthy environment.

There being a quorum of the Commission present, a hearing was commenced. Present for Jay-Bee were Valerie H. Raupp, Esq., appearing as counsel, Shane Dowell of Jay-Bee, David Jackson, of Jackson Surveying, Inc. and Donald Kesterson, consultant and petroleum geologist. Present for Antero Resources Corporation was counsel Roger S. Christenson II.

The Commission heard testimony from three witnesses, Shane Dowell, David Jackson, P.S., and Donald Kesterson. Their testimony and response to questions by members of the Commission included the reasoning for spacing the Larry 3U well bottom hole within 3,000 feet of the bottom hole of the Rymer 4HD and specifically the need for an additional 179 feet in addition to the previously granted exception; characteristics of the Utica/ Point Pleasant formation in which the Larry 3U well will be drilled; discussion of existing data from other Utica/Point Pleasant wells; issues related to potential drainage and expected pressures. The Commission determined that limited testimony regarding the compliance of the permit application with relevant requirements was required in this instance as the permit has been approved and issued for a shorter length on April 20, 2016 and that permit was entered into evidence in the prior hearing. Upon Motion by counsel for Jay-Bee, the Commission incorporated the transcript from the June 13, 2016 hearing and resultant Report of Commission and Order granting the requested exception into evidence in this matter. Documents submitted as exhibits, included specifically, the notice of hearing related to the second exception request, confirmation that notice was posted on the West Virginia Secretary of State website and in the Tyler Star News, a letter requesting the second extension dated June 14, 2016, an Amended application and plat for the first exception, the transcript from the June 13, 2016 hearing with exhibits, the Report of the Commission and Order for the June 13, 2016 hearing, a revised plat showing the proposed new exception, and an exhibit map showing a two (2) mile offset view of the proposed revised distances. There were no objections to the exhibits or the proposed exception.

Following the witness testimony, the Commission adjourned for an executive session. Following an executive session, a member of the Commission made a motion to grant Jay-Bee's request to extend the Larry 3U's lateral length of the horizontal well bore by 179 feet beyond the previously approved exception and closer to the Rymer 4HD, API# 47-095-02273 as described in the submitted exhibits. The motion was properly seconded and a vote was taken without objection. The motion passed unanimously and Jay-Bee's request was granted.

Thereupon, the Commission makes the following Findings of Fact and Conclusions of Law:

### **FINDINGS OF FACT**

1. Members of the Commission present at the hearing were Barry Lay, Chair, Robert Radabaugh, Anthony Gum, Chief James Martin and ex officio member Lisa McClung as proxy for Randy Huffman. Counsel for the Commission Greg Foster and staff member Carrie Brooks were also present for the Commission.

2. Jay-Bee is an operator within the meaning of paragraph (4) subsection (a) of West Virginia Code § 22C-9-2.

3. Jay-Bee proposes to drill the Larry 3U well into the Trenton/Utica/Point Pleasant formation, making the well a deep well as defined by West Virginia Code § 22C-9-2.

4. The Larry 3U well was permitted on April 20, 2016, with a plat revised and dated April 27, 2016 reflecting a horizontal leg length of 6,258 feet. The permit issued demonstrates that all the necessary statutory information for a deep well permit application, including proof that all requisite notices were provided, has been appropriately submitted for the Larry 3U permit application.

5. Jay-Bee immediately sought an exception hearing pursuant to W.Va. C.S.R § 39-1-4.3. and that exception was granted at the June 13, 2016 hearing and by Report of the Commission and Order dated June 29, 2016 ("Order No. 1" or "previous Order"). The June 13,

2016 hearing transcript was entered into evidence as Exhibit 6 and Order No. 1 was entered into evidence as Exhibit 7 upon motion of counsel for Jay-Bee. The Commission relied on that June 13, 2016 transcript and Order No. 1 in evaluating the extension request presented in this hearing to the extent that testimony and exhibits were relevant and similar to the instant request.

6. Antero Resources Corporation is the operator of the Rymer 4HD and was present at the hearing through their representative Roger S. Christenson II, Esq. No objection to the proposed exception was made by Antero Resources Corporation.

7. Jay-Bee is the operator of the Moe 3U well, API No. 47-095-02321 ("Moe 3U") and was present at the hearing.

8. No other operator or well was affected by the request for exception.

9. The top hole location of the Larry 3U well is not within 3,000 feet of any other permitted oil or gas well.

10. The horizontal leg of the Larry 3U is within 3,000 feet of the top hole of the Moe 3U well, as permitted on May 12, 2016, specifically approximately 2,087 feet and this was approved on June 13, 2016 by Order No. 1 and remains unchanged.

11. The horizontal leg of the Larry 3U is within 3,000 feet of the landing point of the Moe 3U, as permitted on May 12, 2016, specifically approximately 2,980 feet and this was approved on June 13, 2016 by Order No. 1 and remains unchanged.

12. The bottom hole of the Larry 3U is within 3,000 feet of the bottom hole of the Rymer 4HD, as permitted, specifically approximately 2,136 feet as approved on June 13, 2016 by Order No. 1. Jay-Bee seeks to extend its lateral 179 feet, changing this distance between the Larry 3U bottom hole and the Rymer 4HD bottom hole to 1,957 feet.

13. The distance from the unit boundary to the bottom hole of the Larry 3U was approved at 582 feet in the June 13, 2016 hearing and in Order No. 1. Jay-Bee's request in this exception is to decrease that distance to 410 feet from the unit boundary to the bottom hole of the



Larry 3U. In all instances, however, the Larry 3U well is more than 400 feet from the unit boundary.

14. It is the position of the Commission that the location of the Larry 3U requires a variance to W.Va. C.S.R. § 39-1-4.2 with regard to the second proposed extension of the horizontal leg and revised bottom hole location with regard to the distance between the bottom hole of the Larry 3U and the bottom hole of the Rymer 4HD.

15. The formation from which the Larry 3U seeks to produce is a shale formation that requires stimulation to produce. The stimulation in this case is through fracturing the shale and horizontal drilling as described in the Larry 3U permit.

16. Undisputed testimony from petroleum geologist Donald Kesterson established that given the characteristics of the formation and the drilling process required for production of gas from that formation, the proposed extension and revised location of the Larry 3U bottom hole would not drain, interfere with, decrease or otherwise effect production from the Rymer 4HD. Specifically he testified that the bottom holes of these wells would be "toe to toe" and that there would remain untapped reserves between the bottom holes of the two wells.

17. Undisputed testimony from petroleum geologist Donald Kesterson established that the additional extension of the horizontal leg of 179 feet would reach reserves that would be otherwise untapped and maximize production of natural gas from Jay-Bee's unit.

18. There were no objections to the spacing exception request.

19. A motion to grant Jay-Bee's second, additional spacing exception request with regard to the Rymer 4HD to extend by 179 feet beyond the previously approved extension and variance was made and seconded.

20. The motion passed unanimously.

#### **CONCLUSIONS OF LAW**

1. That W.Va. C.S.R. § 39-1-4.2 requires that all deep wells drilled shall be not less

than 3,000 feet from a permitted deep well location and that W.Va. C.S.R. § 39-1-4.3 allows for an exception to that requirement upon notice and hearing.

2. That due notice of time, place and purpose of the hearing has been given as required by law.

3. That pursuant to Chapter 22C, Article 9, of the West Virginia Code, as amended, the Commission has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order, and that a quorum of the Commission was present at the hearing.

4. The requested spacing exception is required with regard to the Rymer 4HD.

5. Under Order No. 1 the Commission approved the Larry 3U to be drilled within 3,000 feet of Jay-Bee's Moe 3U well and the Rymer 4HD well. Order No. 1 remains in effect and controlling unless expressly modified by this Order. Specifically, the exception with regard to the points identified in Order No. 1 as within 3,000 feet of the Moe 3U well remain approved and unchanged by this Order.

6. The requested second exception to extend by 179 feet beyond the previously granted exception to within 1,957 feet of the bottom hole of the Rymer 4HD is necessary to promote the efficient development of oil and gas resources, prohibit waste, and encourage the maximum recovery of oil and gas resources. *See* W.Va. Code § 22C-9-1 and should be, and hereby is, granted.

### **ORDER**

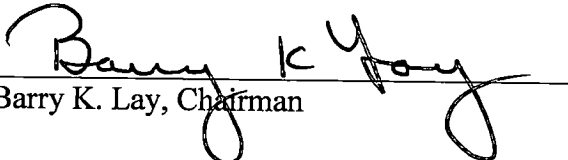
Upon presentation of evidence at a hearing before the West Virginia Oil and Gas Conservation Commission on July 27, 2016, and based upon the Findings of Fact and Conclusions of Law contained herein, the Commission hereby grants a variance and exception from the requirements in W.Va. C.S.R. § 39-1-4.2 that states in relevant part, "each deep well drilled shall not be less than 3,000 feet from a permitted deep well location . . . " The spacing

exception granted hereby is in addition to the exception granted at the June 13, 2016 hearing and by Order No. 1, and permits Jay-Bee to drill the Larry 3U well bottom hole within 1,957 feet of the Rymer 4HD, API No. 47-095-02273 bottom hole as depicted on the maps admitted into evidence during the hearing. The exception granted with regard to the Larry 3U location and the Moe 3U location remains unchanged.

**IT IS SO ORDERED.**

**IN THE NAME OF THE STATE OF WEST VIRGINIA**

**OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA**

By:   
Barry K. Lay, Chairman

Dated this 9<sup>th</sup> day of August, 2016, at Charleston, West Virginia.



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August 1, 2016

**Via Hand Delivery**

Barry Lay, Chairman  
Oil and Gas Conservation Commission  
601 57th Street  
Charleston, WV 25304


**Re: *Jay-Bee Oil & Gas, Inc. Request for Exception***  
**Docket No. 241, Cause No. 230**

Dear Chairman Lay:

Please find enclosed a proposed Report of Commission and Order for your consideration in the above-referenced matter. We provided the same to Antero Resources Corporation's representative Roger S. Christenson, II, Esq. and received approval of the language today. If the Report of Commission and Order meets with the approval of the Commission, we respectfully request that it be entered.

Thank you for your attention to this matter and should you have any questions, please do not hesitate to contact me.

Sincerely,



Valerie H. Raupp

vhf/dc

Enclosure

cc: Cindy Raines (*via e-mail and hand delivery*)  
Greg Foster, Esq., for the Commission (*via email at greg.s.foster@wvago.gov*)  
Roger S. Christenson, II, Esq., for Antero Resources Corporation  
(*via email at rchristenson@anteroresources.com*)  
Jay-Bee Oil & Gas, Inc. (*via email*)

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY  
JAY-BEE OIL & GAS, INC. FOR AN  
EXCEPTION TO RULE 39CSR1.4.2  
FOR THE DRILLING OF THE WELL  
IDENTIFIED AS THE LARRY 3U,  
API: 47-095-02334. JAY-BEE IS  
PROPOSING TO EXTEND THE LATERAL  
ON A PREVIOUSLY APPROVED LOCATION.  
THE LARRY 3U WELL IS TO BE  
LOCATED IN ELLSWORTH DISTRICT,  
TYLER COUNTY, WEST VIRGINIA.

DOCKET NO. 241  
CAUSE NO. 230

Transcript of proceedings had or testimony  
adduced in the above-styled matter before the Oil and Gas  
Conservation Commission in a hearing held at the  
Department of Environmental Protection, 601 57th Street,  
Southeast, Charleston, Kanawha County, West Virginia, on  
the 27th day of July, 2014, at 1:00 p.m.

BEFORE: Barry K. Lay, Chairman  
Robert Radabaugh, Commissioner  
Anthony Gum, Commissioner  
James Martin, Commissioner  
Lisa McClung, Commissioner

## APPEARANCES:

Greg Foster, Counsel for OGCC  
Carrie Brooks, Staff

ON BEHALF OF JAY-BEE OIL AND GAS, INC.:

Valerie H. Raupp, Esquire  
Lewis Glasser, Casey and Rollins  
Post Office Box 1746  
Charleston, West Virginia 25326-1746

ON BEHALF OF ANTERO:

Roger Christianson, Counsel for Antero

CHAIRMAN LAY: Before the Oil and Gas Conservation Commission of the State of West Virginia in the matter of the request by Jay-Bee Oil & Gas, Inc. for an exception to Rule 39CSR1.4.2 for the drilling of the well identified as the Larry 3U, API: 47-095-02334. Jay-Bee is proposing to extend the lateral on a previously approved location. The Larry 3U well is to be located in Ellsworth District, Tyler County, West Virginia. This is Docket No. 241, Cause No. 230. Let the record show that present are members of the Commission, James Martin, Anthony Gum, Robert Radabaugh and Barry Lay. Also present is Greg Foster, counsel, and Carrie Brooks from Staff.

I'd like to place of record as Exhibit 1 a copy of the Notice of Hearing along with certified mail cards, Exhibit 2, confirmation of the posting of the meeting on the Secretary of State's website, Exhibit 3, copy of the Notice of Publication with the Tyler Star News.

Exhibit 4 is a letter dated June 14, 2016, from Jay-Bee Oil & Gas, Inc. requesting a hearing to extend the lateral, signed by Shane Dowell.

And finally, Exhibit 5 is a copy of the amended pages of the Application and a copy of the amended

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1 plat.

2 (WHEREUPON, said documents were  
3 identified as Exhibits Nos. 1-5 and  
4 are attached hereto and made a part  
5 hereof.)

6 CHAIRMAN LAY: Commission will now take  
7 appearances.

8 MS. RAUPP: Commissioner, my name is Valerie  
9 Raupp from Lewis, Glasser, Casey & Rollins. I'm here on  
10 behalf of Jay-Bee Oil & Gas.

11 MR. DOWELL: Shane Dowell, Office Manager at  
12 Jay-Bee Oil & Gas, representing Jay-Bee Oil & Gas.

13 MR. JACKSON: I'm David Jackson O Jackson  
14 Surveying. I do the survey work for Jay-Bee Oil & Gas.

15 MR. KESTERSON: I'm Donald C. Kesterson. I'm  
16 consulting petroleum geologist doing consulting work for  
17 Jay-Bee.

18 MR. CHRISTIANSON: I'm Roger Christianson. I'm  
19 with Antero Resources.

20 CHAIRMAN LAY: Okay. Any other housekeeping  
21 issues?

22 MS. RAUPP: Yes. Commissioner, I would ask the  
23 Commission to make a motion to incorporate the transcript  
24 of the prior exception hearing which was Docket No. 240,

1 Cause No. 230, which was the original request for  
2 exception.

3 There was a hearing on June 13th and the  
4 Order granting that exception as Exhibit 6 to this matter  
5 and so that we could utilize the testimony and information  
6 from that original hearing in this matter.

7 CHAIRMAN LAY: There are no objections, or are  
8 there objections, I guess?

9 COMMISSIONER RADABAUGH: No, sir.

10 CHAIRMAN LAY: If not, we'll enter the previous  
11 transcript as Exhibit 6.

12 (WHEREUPON, said document was  
13 identified as Exhibit No. 6 and  
14 is attached hereto and made a part  
15 hereof.)

16 CHAIRMAN LAY: I'd like to also supplement the  
17 record--

18 MR. FOSTER: Does this contain the Order  
19 granting it, too?

20 MS. RAUPP: It does not, but I do have that as  
21 an exhibit. I would amend my motion to include that  
22 Order.

23 MR. FOSTER: Well, I think you can say you  
24 already included it.

1 submitted and is currently pending.

2 In preparation for that original hearing on  
3 June 13th, it came to light and evidence will show that  
4 Jay-Bee believed an additional extension would benefit the  
5 development and maximization of production of gas in this  
6 area. So they submitted a second exception request also  
7 dated June 14, 2016. That is the exception that we're  
8 here for today.

9 The extension is approximately 179 feet,  
10 evidence will show, and someone's here to testify as to  
11 the exact length of an extension of the prior exception.  
12 And we believe-- And Jay-Bee believes that this will show  
13 that this will maximize the development of oil and gas  
14 resources and prohibit waste in this area.

15 CHAIRMAN LAY: Would you call your first  
16 witness?

17 MS. RAUPP: I'd call Shane Dowell, please.

18 (Witness sworn.)

19 THEREUPON came

20 SHANE DOWELL

21 called as a witness for the Applicant herein, being first  
22 duly sworn according to law, testified as follows:

23 DIRECT EXAMINATION

24 BY MS. RAUPP:

1 MS. RAUPP: Okay. I apologize. I do have a  
2 copy of the Order entered in that matter that I would also  
3 move to be Exhibit 7.

4 CHAIRMAN LAY: Exhibit 7? No objections? We'll  
5 enter the Order as Exhibit 7. I'd like to also amend the  
6 record to say that Lisa McClung has joined us as a member  
7 of the Commission to the hearing, so she is also here  
8 representing the Commission.

9 (WHEREUPON, said document was  
10 identified as Exhibit No. 7 and  
11 is attached hereto and made a part  
12 hereof.)

13 CHAIRMAN LAY: That being the case, Ms. Raupp,  
14 would you proceed with your case?

15 MR. RAUPP: Yes, Chairman. Thank you. Chairman  
16 Lay and Commissioners, in this case just as we set forth  
17 briefly in the Motion is a second exception request for  
18 the Larry 3U deep well. The Larry 3U deep well has an  
19 active permit granted April 20, 2016.

20 An exception was granted by this Commission  
21 to extend the lateral leg within the three thousand foot  
22 buffer of the bottom hole, but the lateral leg surrounding  
23 the Rymer 4HD well and the Moe 3U well. That exception  
24 was granted, and the modification to the permit was

1 Q Would you state your full name for the record,  
2 please?

3 A Shane Dowell.

4 Q And did you testify at the June 13th hearing for  
5 an exception for the Larry 3U well in this matter?

6 A Yes.

7 Q At that time, did you take us through your  
8 background experience in the field and education?

9 A Yes.

10 Q And your experience with gas permitting in,  
11 particularly, horizontal wells?

12 A Yes.

13 Q Has anything changed with regard to your  
14 experience or credentials in that matter?

15 A No.

16 Q You continue to be familiar with the application  
17 process for drilling horizontal wells--

18 A Yes.

19 Q --gas well? Are you familiar with the  
20 regulations that govern those applications?

21 A Yes.

22 Q And did you submit the Applicant for the Larry  
23 3U well?

24 A Yes.

1 Q And was that permit granted on April 20, 2016?  
 2 A Yes.  
 3 Q And to your recollection, was that a part of the  
 4 record in the prior exception hearing?  
 5 A Yes. It was.  
 6 Q If I represent to you that it was admitted as  
 7 Exhibit 9, would that--  
 8 A That sounds right.  
 9 Q Would you agree with that?  
 10 A Yes.  
 11 Q Now, was the permit granted?  
 12 A Yes. It was.  
 13 Q Was it complete and accurate?  
 14 A Yes.  
 15 Q And have you received any notices of any  
 16 problems since the last hearing on June 13th with regard  
 17 to that permit or the proposed modification to that  
 18 permit?  
 19 A No. I have not.  
 20 Q Are you familiar with the exception requested at  
 21 the June 13th hearing?  
 22 A Yes.  
 23 Q And I'm showing you Exhibit 7 from the prior  
 24 hearing. I'm going to ask you to look at this Exhibit 7.

1 Does that look familiar to you?  
 2 A Yes. It does.  
 3 Q And is that the Order which contains the  
 4 findings in the Order of the Commission in the prior  
 5 exception hearing?  
 6 A Yes. It is.  
 7 Q What happened after you-- Did you submit a  
 8 modification request with regard to that first exception  
 9 hearing to the Office of Oil & Gas?  
 10 A Yes. I did.  
 11 Q Ask you to look at that. Would you tell me what  
 12 this is?  
 13 A This is my original submission showing the last  
 14 exception that was granted and adjusting the plats and  
 15 distances.  
 16 Q So is this plat and this request for  
 17 modification based on that Order in the exception hearing  
 18 that we previously identified as Exhibit 7?  
 19 A Yes. It is.  
 20 Q And this was presented to the Horizontal Well  
 21 Permitting office. Did you understand that was a required  
 22 step after the last--  
 23 A Yes.  
 24 Q --hearing? All right. Did you-- Could I see

1 Exhibit 4, please? Are you familiar with this document?  
 2 A Yes.  
 3 Q And did you draft this document?  
 4 A Yes. I did.  
 5 Q Did you sign this document? Is that your  
 6 signature?  
 7 A Yes. I did.  
 8 Q Is this-- Could you tell us what this is?  
 9 A This is the request for additional extension and  
 10 exception modification from the previous exception hearing  
 11 approval to extend our leg.  
 12 Q Were any other modifications to the Larry 3U  
 13 well proposed in this request?  
 14 A I'm sorry. Say that again.  
 15 Q Were there any other changes to the Larry 3U  
 16 horizontal leg proposed with regard to this or does it  
 17 just--  
 18 A No.  
 19 Q --simply add a leg to the end?  
 20 A Only the extension.  
 21 Q Okay. And how far-- What's the difference  
 22 between the exception you're seeking now and the exception  
 23 that was previously granted?  
 24 A This extension goes -- allows us to go within

1 410 foot of our boundary at roughly 1,957 feet from the  
 2 Rymer 4HD bottom hole.  
 3 Q Other than that additional extension of the  
 4 lateral length, does the new proposed Larry 3U location  
 5 horizontal leg meet all well location restrictions?  
 6 A Yes.  
 7 Q Under the exception sought at this hearing, is  
 8 the Larry 3U further than 400 feet from the unit boundary?  
 9 A Yes.  
 10 MS. RAUPP: That's all I have at this time.  
 11 CHAIRMAN LAY: Questions for the witness?  
 12 Members of the Commission?  
 13 COMMISSIONER GUM: Not at this time.  
 14 COMMISSIONER MARTIN: I have some, Mr. Chairman.  
 15 I wasn't at the earlier hearing, so a little mind curve  
 16 problem here.  
 17 EXAMINATION  
 18 BY COMMISSIONER MARTIN:  
 19 Q Just so I've got the facts right at the time--  
 20 The original permit for this well was issued on April  
 21 20th, 2016.  
 22 A Yes.  
 23 Q Is that right? There was a hearing request and  
 24 a hearing that was held on June 13th before this



1 Commission to extend the lateral.

2 A Yes.

3 Q Right? What was the original length of the  
4 permit that was issued on April 20th? What was the  
5 original length of the lateral? Well, maybe the question  
6 would be how much were you adding -- were you extending it  
7 in the previous hearing?

8 A I would have to-- I would have to reflect on  
9 that. I'm not really sure what the difference was from  
10 the previous--

11 MS. RAUPP: If I may, there may be someone else  
12 here who could better answer that, if that's--

13 COMMISSIONER MARTIN: That's fine.

14 MS. RAUPP: --helpful.

15 CHAIRMAN LAY: If that's all right with--

16 COMMISSIONER MARTIN: Yeah. That's fine.

17 BY COMMISSIONER MARTIN:

18 Q And probably the other questions I had-- I was  
19 curious how much lateral length you're requesting this  
20 time.

21 A This time it's an additional, roughly,  
22 approximately, 179 feet.

23 Q The-- So the hearing was held on the first  
24 extension request on June 13th.

1 A Yes.

2 Q And there was a request to extend it further the  
3 next day, June 13th?

4 A Yes.

5 Q Is there-- Can you explain? Is someone else  
6 going to address how that occurred or why that occurred?

7 A No. I can explain it. Yeah. We initially had  
8 the permit, of course, in hand. And we were, of course,  
9 made aware of the presence of the Rymer 4HD. So we  
10 extended for an exception hearing based off of the  
11 original setup, original plat.

12 During our review in preparation for the  
13 exception hearing on June 13th, we realized we could  
14 extend the leg even further to better capture natural gas  
15 under the surface. Of course, my geologist can explain  
16 that a little bit further, but--

17 So during our preparation, we realized we  
18 could extend it farther. So we submitted the exception  
19 after the -- the modification after that exception hearing  
20 was completed.

21 Q So basically at the time of the June 13th  
22 hearing, you knew you needed additional footage? You all  
23 knew that then?

24 A Just found out, yes.

1 Q The modification that came, I guess, as a result  
2 of the June 13th hearing, that hasn't been approved yet?

3 A It has been approved by the Commission.

4 Q I mean the permit itself, the Office of Oil and  
5 Gas.

6 A It is currently in Laura's hands. Correct.

7 Q And can you tell me how close the new bottom  
8 hole location is to the well that's in question?

9 A Yeah.

10 Q Maybe you already touched on that.

11 A It is approximately 1,957 feet from their bottom  
12 hole.

13 Q From which well?

14 A Of the Rymer 4HD.

15 Q And was there another well that was involved  
16 also that you were within 3,000 feet of?

17 A Our own Moe 3U.

18 Q How close are you to that one?

19 A I do believe it's approximately 2,980 feet from  
20 the landing point of that well.

21 Q So the closest you are is the 2,980?

22 A Yes.

23 Q That's from bottom hole location of the Larry  
24 well to the--

1 A I believe it's from the top hole location. I  
2 would probably have to defer to my surveyor to confirm  
3 that, but I believe it's from the top hole's location to  
4 the landing point of the Moe 3U, is the distance.

5 COMMISSIONER MARTIN: okay. Thank you.

6 CHAIRMAN LAY: Any other questions?

7 MS. RAUPP: Could I ask one follow-up that may  
8 clear up--

9 CHAIRMAN LAY: Yes.

10 MS. RAUPP: --some of Mr. Martin's questions?

11 DIRECT EXAMINATION (CONTINUED)

12 BY MS. RAUPP:

13 Q Did you have any business reasons for waiting to  
14 request the additional footage, not requesting it at the  
15 June 13th hearing?

16 A Business reasons? I mean, we have a top hole  
17 rig prepped and ready for the drilling of the well itself.  
18 But outside of that--

19 Q Was there anybody else that you wanted to  
20 discuss the change in--

21 A Oh. I did want to discuss with Antero. We were  
22 in negotiations with Antero or discussions with Antero on  
23 the bottom hole location and the proximity to the unit  
24 boundary and to their well. And there was a certain

1 footage that we were in discussions with that were never  
2 really resolved at that point.

3 Q And so you wanted to take additional time to--

4 A Correct.

5 Q --see if you could go through those issues?

6 A Yes.

7 Q And are you requesting at this exception

8 hearing, is there any additional point that was not

9 resolved in the June 13th hearing? Any additional point

10 on the Moe 3U well that would be within 3,000 feet of the

11 Larry 3U well? Anything that was not addressed in the

12 June 13th hearing or the Order from that hearing, which

13 are Exhibits 6 and 7 to this hearing?

14 A There are no more.

15 MS. RAUPP: That's all I have.

16 EXAMINATION

17 BY COMMISSIONER McCLUNG:

18 Q One question. So were you able to satisfy

19 Antero or is it still--

20 A We have basically ended discussion at that

21 point, and there was no resolution either way. There was

22 no specific documents or anything that were devised one

23 way or another. It was just a discussion.

24 CHAIRMAN LAY: Other questions? Okay. Witness

1 may be excused.

2 (Witness excused.)

3 CHAIRMAN LAY: You can call your next witness,  
4 please.

5 MS. RAUPP: Thank you, Chairman. I'd call David  
6 Jackson to the stand, please.

7 (Witness sworn.)

8 THEREUPON came

9 DAVID L. JACKSON

10 called as a witness by the Applicant herein, being first

11 duly sworn according to law, testified as follows:

12 DIRECT EXAMINATION

13 BY MS. RAUPP:

14 Q Mr. Jackson, did you testify at the original

15 hearing on June 13th in this matter?

16 A I did.

17 Q Sorry. Could you state your full name for the  
18 record?

19 A David L. Jackson.

20 Q And I believe at the June 13th hearing you took

21 us through your background experience in the field and

22 educational. Has anything changed since that time?

23 A No.

24 Q Are you still a professional surveyor?

1 A Yes.

2 Q Okay. In West Virginia?

3 A Yes.

4 Q In preparation for this hearing and the June

5 13th hearing, did you become familiar with the Application

6 and the Permit for the Larry 3U--

7 A Yes.

8 Q --well? Okay. And did you draft the plat that

9 was approved in the prior exception hearing?

10 A I did.

11 Q I'll show you what was Exhibit 8 to the June

12 13th hearing, which is Exhibit 6 to these proceedings. Do

13 you recognize this document?

14 A I do.

15 Q Is this the plat that was approved and the

16 distances that were approved in the prior hearing?

17 A Yes. It was.

18 Q Okay. And what is the distance from the Larry

19 3U bottom hole to the Rymer 4HD bottom hole in that

20 hearing?

21 A It's 2,136 feet.

22 Q And what is the distance from the unit boundary

23 for the Larry 3U bottom hole to the unit boundary?

24 A Five hundred and eighty-two feet.

1 Q Okay. And is it your-- Were you asked to  
2 prepare a new plat for this second exception hearing?

3 A I was.

4 Q Could you describe this for us?

5 A Yes. This is an extension of the Larry 3U leg.

6 It goes an additional 179 feet from the bottom hole on the

7 plat that was granted in the exception. It goes to within

8 410 feet from the unit boundary line, and it is now 1,957

9 feet from the Rymer bottom hole location.

10 Q The Rymer 4HD?

11 A That's correct.

12 Q Okay. And is that-- Does the proposed

13 extension for this exception hearing come within 3,000

14 feet of the Moe 3U or any proposed extension of that?

15 A Yes. It comes within 2,980 feet. The leg of

16 the Larry 3U is 2,980 feet from the Moe 3U landing point.

17 And the bottom hole of the Larry 3U is like 3,062 feet

18 from the leg of the Moe 3U.

19 Q Okay. I'm sorry. I didn't phrase my question

20 properly. Does the extension that Jay-Bee is seeking

21 today, not the exception that was previously granted--

22 A Mm-hum.

23 Q Is there anything about the exception that's

24 presented today that is within 3,000 feet of any deep

1 well, including the Moe 3U, other than the Rymer 4HD that  
2 you've already identified for us?

3 A No. There's no changes from the original  
4 location that was permitted or approved.

5 Q Okay. Now, based on your experience and your  
6 knowledge of the permitting regulations and in the  
7 permitting standards, do you believe this plat is complete  
8 and accurate under the regulations for the permitting of a  
9 deep horizontal well?

10 A Yes.

11 MS. RAUPP: I would ask that this be marked as  
12 Exhibit 8.

13 CHAIRMAN LAY: Any objections? We'll enter the  
14 exhibit as Exhibit 8.

15 (WHEREUPON, said document was  
16 identified as Exhibit No. 8 and  
17 is attached hereto and made a part  
18 hereof.)

19 BY MS. RAUPP:

20 Q Is the proposed new exception to Larry 3 bottom  
21 hole, just to confirm, more than 400 feet from the unit  
22 boundary?

23 A Yes. It is.

24 Q Could you take a look at this document that I've

1 placed in front of you? Do you recognize this?

2 A Yes.

3 Q And did you draft this or survey it?

4 A Yes. I did.

5 Q Is this your signature in the corner, the  
6 lefthand corner?

7 A Yes.

8 Q Could you explain to us what this is?

9 A This is an exhibit showing the two-mile area  
10 around the Larry 3U top hole leg and bottom hole, and it  
11 also shows a 3,000 foot distance in green around the leg  
12 of the Larry 3U. It also-- It shows the distance between  
13 the Larry 3U bottom hole and the Antero Rymer 4H as 1,957  
14 feet. And it shows the distances over to the Moe 3U leg.

15 Q And the Moe 3U leg is not at issue at this  
16 hearing, but is it different in this drawing than it is  
17 for the Moe 3U?

18 A In this drawing, it shows an extension, a  
19 proposed extension to the leg to get it 410 feet from the  
20 lease line.

21 Q And has that been applied for separately and  
22 pending separately?

23 A Yes.

24 Q So you included this out of an abundance of

1 caution to be clear with the Commission as to every  
2 possible pending well within 3,000 feet?

3 A That's correct.

4 MS. RAUPP: I'd ask that this be marked as  
5 Exhibit 9.

6 CHAIRMAN LAY: Any objections? Okay. We'll  
7 enter it as Exhibit 9.

8 (WHEREUPON, said document was  
9 identified as Exhibit No. 9 and  
10 is attached hereto and made a part  
11 hereof.)

12 MS. RAUPP: I have no further questions.

13 CHAIRMAN LAY: Okay. Questions? Questions from  
14 members of the Commission?

15 EXAMINATION

16 BY COMMISSIONER RADABAUGH:

17 Q Oh, just one. My math's not real good, so bear  
18 with me here. On the extension, you stated that the new  
19 extension's going to be 179 feet.

20 A Right.

21 Q But when I look at the plat that was used at the  
22 last hearing, it was at 582 feet from the unit boundary.  
23 This time, you've got 410 feet unit boundary. If I  
24 subtract the two, I get 172 feet.

1 A That's correct. It has to do with the angle of  
2 the property line--

3 Q Okay.

4 A --in relationship to being perpendicular as  
5 opposed to the lengthening of the leg. So the actual  
6 lengthening of the leg is from-- I think it was 7,132  
7 feet to 7,311 feet.

8 COMMISSIONER RADABAUGH: Okay. Some of that  
9 surveyor stuff. All right. I'm good.

10 EXAMINATION

11 BY COMMISSIONER MARTIN:

12 Q Mr. Jackson, I guess you hear my earlier  
13 question that I'd asked. Do you know what the extent that  
14 the length was on the previous hearing?

15 A Yes. It was 874 feet. It went from, I believe  
16 it was, 6,258 to 7,132 feet.

17 Q Do you know why it was extended the first time?

18 A Originally, a plat was submitted for the 7,132  
19 feet, and we became aware of the Antero Resource Rymer 4H  
20 or the 4 well. And so basically, we submitted a plat that  
21 would be 3,000 feet from the bottom hole from the Antero  
22 well, which gave us a length of 6,258 feet.

23 So the last hearing was to extend it to the  
24 original well plat, length of 7,132 feet.

1 Q And so this hearing is to extend it an  
2 additional 179 feet. Right?  
3 A Yes, sir. To get it to within 410 of the unit  
4 boundary line.  
5 Q Do you know what the orientation is of the  
6 Antero Rymer 4H?  
7 A Not right offhand.  
8 Q But the closest point to it is the surface  
9 location from the bottom of the location of this one?  
10 A The closest point is from bottom hole to bottom  
11 hole.  
12 Q On your map, you show a measurement to the top  
13 hole.  
14 A Pardon?  
15 Q You don't show the orientation to the-- I'm  
16 sorry. That's the bottom hole. So it's 1957--  
17 A Yes, sir.  
18 Q --on the bottom hole.  
19 A Yes, sir.  
20 Q I'm sorry. I was looking at the top hole.  
21 Thank you.  
22 A Yes, sir.  
23 EXAMINATION  
24 BY CHAIRMAN LAY:

1 Q Only question I have is just to make sure that  
2 I'm clear, and you may not be the right person. We may  
3 have to go back to Mr. Dowell.  
4 On your plat, the proposed unit is outlined  
5 in red. Is that correct the way you have it drawn?  
6 A Yes, sir.  
7 Q So the-- It's hard to distinguish in here, but  
8 from your plat, then I'm assuming that the 34.94 acre  
9 Fletcher tract to the south is not part of the unit, or is  
10 part of that tract included in this unit?  
11 A It is not a part of the unit.  
12 Q Okay. However, the 100 acre West Virginia DNR  
13 tract is part of the unit on the southeastern side?  
14 A Okay. That is-- Yes, a part of the 100 acres,  
15 not the entire 100 acres.  
16 Q Okay. Okay. And you were provided the  
17 information on the lease boundaries from your client,  
18 Jay-Bee?  
19 A That's correct. Except for-- What I would do,  
20 they would give me an outline of the lease boundaries, and  
21 I would adjust it if there was property lines involved. I  
22 would adjust it to the field evidence for the actual  
23 property lines. In this case, I adjusted it to the field  
24 evidence that I found for the Fletcher 34.94 acre property

1 line that I found on the ground.  
2 CHAIRMAN LAY: Okay. Okay. I think that's all  
3 the questions I have. Any other questions?  
4 EXAMINATION  
5 BY COMMISSIONER RADABAUGH:  
6 Q One, since you're talking about the Fletcher.  
7 Is that Fletcher, is it included in the Antero unit?  
8 A I can't say for their unit, but I do believe  
9 that it is shown on their plat. So I don't know whether  
10 they have lease on it or not, but I noticed that it was  
11 shown on their well plat.  
12 Q So Jay-Bee does not have it under lease then?  
13 A No, sir, not to my knowledge.  
14 EXAMINATION  
15 BY CHAIRMAN LAY:  
16 Q I'll go back to clarify this just for the record  
17 then. Then based on the evidence in your plat, the  
18 proposed drilling of this well from top hole to the toe,  
19 there is in all areas at least 400 feet from the unit  
20 boundary.  
21 A Yes, sir. That is correct. That is represented  
22 on the plat in a green line. That shows the 400 foot  
23 distance from the leg. And then in the case of the  
24 property line, which is the north line of the Fletcher

1 tract, I show an actual distance on the plat of 410 feet  
2 based upon my field measurements.  
3 CHAIRMAN LAY: Any other questions?  
4 EXAMINATION  
5 BY COMMISSIONER McCLUNG:  
6 Q Since this is a different witness-- So you're  
7 not aware of Antero objecting to this new location at all?  
8 COMMISSIONER RADABAUGH: He's setting right  
9 there (indicating).  
10 MR. CHRISTIANSON: No. Antero-- The map  
11 provided appears to be the same map that we were provided  
12 previously, and we have not objected to this location.  
13 CHAIRMAN LAY: Okay. Any other questions?  
14 Okay. Witness may be excused.  
15 (Witness excused.)  
16 CHAIRMAN LAY: Let's go off the record for a  
17 second.  
18 (WHEREUPON, a brief discussion was  
19 had off the record.)  
20 CHAIRMAN LAY: Ms. Raupp, do you wish to call  
21 your next witness?  
22 MS. RAUPP: Yes. Thank you, Chairman. I would  
23 like to call Don Kesterson.  
24 (Witness sworn.)

1 THEREUPON came  
2 DONALD C. KESTERSON  
3 called as a witness on behalf of the Applicant herein,  
4 being first duly sworn according to law, testified as  
5 follows:

6 DIRECT EXAMINATION

7 BY MS. RAUPP:

8 Q Would you state your full name for the record,  
9 please?

10 A Donald C. Kesterson.

11 Q Mr. Kesterson, did you testify at the June 13th  
12 hearing?

13 A Yes, ma'am.

14 Q At that time, did you take us through your  
15 background in the field and education?

16 A Yes, ma'am.

17 Q Has anything changed since that time?

18 A No, ma'am.

19 Q Just additional experience?

20 A Older and a few more scars.

21 Q You still do work as a petroleum geologist?

22 A Yes, ma'am.

23 Q As part of that, can you tell us generally what  
24 you do?

1 other. And when you go in to frack these wells, generally  
2 speaking most companies will not actually complete the toe  
3 in either well. That's the 1957 feet.

4 What you'll do is you'll come back and  
5 you'll run-- For your first stage, you'll run in the hole  
6 with equipment and you'll perforate back from the shoe.  
7 It will vary in distance, but for argument's sake, we'll  
8 say it's about 20 feet. So in each well, I would--

9 I don't know what Antero's practice is, but  
10 I'm sure it's comparable as industry standards. You'll  
11 complete that well, and you'll do your first frack stage  
12 right there. You'll have a series of generally four  
13 clusters of perforations in that first stage. But your  
14 first initial shots will not be right at the float shoe.  
15 They'll be back at least twenty feet.

16 Q And we are discussing, just so the record's  
17 clear in this case-- I believe we discussed it last time.  
18 --fracking is the well work that's proposed for the Larry  
19 3U in the Utica/Point Pleasant formation?

20 A Yes, ma'am.

21 Q Utica formation.

22 A Generally, with horizontals, we drill the  
23 lateral length and come back in and design the frack  
24 stages as per the amount of complete-able lateral that has

1 A I'm involved with design, directional steering,  
2 tract design and production of really all wells but  
3 currently with respect to Marcellus and Utica wells.

4 Q And are you familiar with the Larry 3U permits  
5 and exception granted on June 13th?

6 A Yes, ma'am.

7 Q And during the June 13th hearing, did we talk  
8 about the type of well work described in that Application?

9 A Yes, ma'am.

10 Q Do you understand that's the same type of well  
11 work? It would be the same well work with the granting of  
12 this extension?

13 A Yes, ma'am.

14 Q At the original hearing-- And I apologize we  
15 did not make it an exhibit. I'd ask you to do it again.  
16 --you drew us a picture that kind of described how the  
17 bottom hole of this Larry 3U well and the Antero Rymer 4HD  
18 well as being toe to toe, the bottom holes, and kind of  
19 drew us a depiction of how the well work would occur based  
20 on your review of those permits and your knowledge of the  
21 industry. Could you see if you could replicate that to  
22 some extent for us so we could talk about it?

23 A (Witness complies.) I've drawn out the two  
24 laterals showing them as permitted, toe to toe to each

1 been drilled. And then we'll lay those out and frack, and  
2 we'll vary the size of the length of each stage.

3 And that number has been dropping over the  
4 last several years as we learn more about the formations.  
5 Some companies, when we started, we were at 300, 350 feet  
6 in the Marcellus. We're now down to under 200 feet on a  
7 completion stage. And that was part of the reason behind  
8 the 179 feet, is we were gaining almost a full stage of  
9 interval for completion.

10 Q Okay. We'll talk about that a little bit more.  
11 But can you, for the purposes of this drawing, show us  
12 what the Larry 3U proposed well work would look like if  
13 you could-- I understand it's a rough drawing.

14 A Right.

15 Q But you would track horizontally, it looks like  
16 is what you've drawn?

17 A What we do, again, the frack stages go out like  
18 this (indicating). I'm sure when Antero did theirs, they  
19 had the same pattern. You perforate along the horizontal,  
20 complete-able leg and you build various stages with a  
21 series of eight drop ball plugs and perforations, and you  
22 move from the toe back to the heel of the well along the  
23 way.

24 The longer the lateral, the more stages you

1 can complete. And in today's drilling environment,  
2 frankly the drilling of the lateral and the completion is  
3 now the more economical portion of the well as opposed to  
4 the top hole drilling with the various strings of casing  
5 and cementing process that has to go into keeping these  
6 wells safe.

7 Q So although we don't know precisely what  
8 Antero's practices are, the industry standard would be,  
9 based on your experience, to frack out horizontally. What  
10 happens-- And that's what's depicted in this picture?

11 A Yes.

12 Q Just based on industry standards?

13 A Yes.

14 Q So what happens to this acreage in the middle,  
15 the gas left in the middle.

16 A Okay. As I discussed in the previous hearing,  
17 this interval that's in between the two wells is left as  
18 stranded reserves. They will not be completed.

19 It would be un-economical under current  
20 conditions for anybody to go in and drill even a vertical  
21 well to attempt to get those reserves. So they'll be  
22 stranded. So the extension of the lateral will actually  
23 utilize the reserves that are then had you not extended  
24 that lateral.

1 Q Do you think that extending the lateral of the  
2 Larry 3U would have an effect on production from the Rymer  
3 Unit 4HD?

4 A Under any industry engineering practice that I  
5 can see at this point in time, I don't see how it's  
6 possible because the fracks go out in a lateral manner.  
7 Since these wells are toe to toe, the distance between the  
8 two bottom hole locations represent stranded reserves or  
9 uncomplete-able reserves. So that distance will just  
10 never be touched. It shouldn't even impinge on the  
11 formation-producing pressure while both wells are in  
12 production.

13 Q So what is the benefit of this additional 179  
14 approximate feet? What is the benefit to the production,  
15 and how does it maximize it? Have you quantified that?

16 A Well, I've attempted to estimate it. They don't  
17 like geologists to quantify too much.

18 Q Okay. Apologize.

19 A But they like us to estimate. We believe that  
20 the extension of this lateral could amount to  
21 approximately 300 mcf a day production and as much as 300  
22 bcf's of ultimate recoverable reserves over the life of  
23 that well. And it will also drain the additional portion  
24 of the lateral.

1 Q That addition 179 feet?

2 A 179 feet. Yes, ma'am.

3 Q Do you have an opinion as a--

4 CHAIRMAN LAY: Excuse me. I want to make sure I  
5 heard correctly. You said 300 bcf?

6 THE WITNESS: Total for the EUR's. We are  
7 dealing in today's world-- I see where you're at. I made  
8 a mistake as far as that goes. What we're looking at is:  
9 per thousand foot of lateral, we're looking in the Utica  
10 to be maybe as much as 1.8 bcf recoverable. So I said--  
11 I gave you the wrong number, so I stand corrected on that.

12 You would get a portion of that related to  
13 the 179 feet, which I'd have to do the math on that. But  
14 it should be about 300 million cubic feet of ultimate  
15 recoverable reserves.

16 CHAIRMAN LAY: Okay. Thanks for the  
17 clarification.

18 BY MS. RAUPP:

19 Q Do you have an opinion, as a petroleum  
20 geologist, as to whether or not the proposed second  
21 extension of the Larry 3U in a variance would maximize  
22 development of oil and gas resources?

23 A Yes.

24 Q What--

1 A Well, to the extent of the 179 feet, we will  
2 gain that much reserves in the well.

3 Q And in your opinion as a petroleum geologist,  
4 would the location allow Jay-Bee to reach some reserves  
5 that would be left in place or untapped under the deep  
6 well spacing rule without the variance?

7 A Yes, ma'am.

8 Q And we've talked about why previously. Correct?

9 A Yes, ma'am.

10 Q Conversely, if the exception's not granted,  
11 would the reserves be left in place?

12 A Yes, ma'am.

13 MS. RAUPP: That's all I have at this time.

14 CHAIRMAN LAY: Questions? Questions from  
15 members of the Commission?

16 EXAMINATION

17 BY COMMISSIONER MARTIN:

18 Q Again, Mr. Chairman, I have a couple here. I'm  
19 assuming-- It's a little bit hard to tell from the plats  
20 exactly, and I wasn't at the last hearing.

21 The new location doesn't intersect any  
22 different mineral owners? No new mineral tracts as a  
23 result of the 179 foot lateral extension? Would you know  
24 that?

1 A Frankly, Mr. Martin, I'm not aware of that.  
 2 That's not something that I--  
 3 Q Yeah.  
 4 A --particularly studied.  
 5 Q Okay. On the WWW6B, you list or I'm on a U  
 6 list, if you had anything with putting this together, but  
 7 the formation and total partial depth is listed as the  
 8 Trenton?  
 9 A Well, the Trenton is the bottom of the well.  
 10 We're going to land in the Utica/Point Pleasant.  
 11 MS. RAUPP: Could I get Exhibit 5 for him to  
 12 look at?  
 13 BY COMMISSIONER MARTIN:  
 14 Q Sure.  
 15 A Since I had nothing to do with preparing the  
 16 permit, I'm going to step out on a limb here a little bit.  
 17 As you know, you will allow us to drill deeper by permit  
 18 than what we actually drill the well.  
 19 So I'm going to assume that the company  
 20 picked the Trenton so that we could drill through all of  
 21 the Utica/Point Pleasant should that be how we design our  
 22 horizontal. And that way, if we were to touch the  
 23 Trenton, it would have been covered by the permit.  
 24 I was not involved in that particular

1 decision process, but that would be my assumption, looking  
 2 at this piece of paper, sir.  
 3 Q So how much footage would there be-- Can you  
 4 tell me the stratigraphy here? Help me with the  
 5 stratigraphy between the Utica/Point Pleasant/Trenton in  
 6 terms of where they are relative to each other?  
 7 A You have the Cincinnati group on top. Then you  
 8 run into the Utica. The Cincinnati group is sometimes  
 9 referred to as the Reedsville for common-ology. But it's  
 10 in the Cincinnati group.  
 11 Then you run into the Utica. And then  
 12 below that, if we're lucky, you have the Point Pleasant.  
 13 And the Point Pleasant is where the best reserves are.  
 14 Then you have a little, tiny limestone  
 15 that's called the Lexington. That's about 50 feet TDD,  
 16 and then you run into your Trenton Black River that lays  
 17 below that.  
 18 Q And the Utica will be approximately how thick?  
 19 A We're hoping to have about 170 feet of Utica and  
 20 about 170 feet of Point Pleasant. It's a transitional  
 21 zone, as you're aware of, sir. And so probably all  
 22 together we might have 300 feet, and that 170 will jockey  
 23 back and forth depending on depositional environment.  
 24 Q And then you have the Lexington between Point

1 Pleasant and Trenton.  
 2 A Yes, sir.  
 3 Q Correct?  
 4 A Yes, sir.  
 5 Q You said about 50 feet?  
 6 A Yes, sir.  
 7 Q How deep into the Trenton is this proposed to  
 8 go?  
 9 A We don't want to go into the Trenton. Again,  
 10 and I'm speaking without knowledge for how the permit was  
 11 prepared. But as I've always been taught in my thirty  
 12 years of experience, it's better to permit deep. And if  
 13 you drill short of that, everybody at the State's happy.  
 14 If you permit shallow and drill deep, then you end up  
 15 sitting there and having to explain things.  
 16 Q So as far as you know, the intent is not to go  
 17 into the Trenton?  
 18 A No, sir. Our goal-- Now, we will drill a pilot  
 19 hole to log it and get our landing points.  
 20 Q And where will that TD?  
 21 A Well, according to this, our TVD is 10,730 feet.  
 22 Q And what formation is that?  
 23 A That should put us into the Trenton so that we  
 24 can get logging tools and everything into the hole.

1 Q Right. That's what I'm getting at. So the TD  
 2 will be in Trenton?  
 3 A Yes, sir.  
 4 Q In the vertical.  
 5 A Yes, sir, for purposes of doing a science  
 6 project and get--  
 7 Q How deep into the Trenton will that vertical  
 8 section go?  
 9 A I'm going to estimate 50 feet. Again, we  
 10 permitted it so that we could do it in a one-log run.  
 11 Q And there's no plans to do any completion work  
 12 in the Trenton?  
 13 A No, sir. Our goal is to plug back and complete  
 14 the well completely in the Point Pleasant.  
 15 Q Is there Trenton potential in this area?  
 16 A I am unaware of any Trenton wells any closer  
 17 than Ohio or Jackson County. That doesn't mean it's not  
 18 there. But as a close-ologist geologist, I'm not aware of  
 19 anything that has indicated potential.  
 20 Q And again I apologize to ask this again, but I  
 21 got confused originally, also. And Barry, the Chairman, I  
 22 think got it cleared up. But just so I'm clear, the 179  
 23 feet, what's the additional reserves attributable to that?  
 24 A No. Actually, Barry got it right. I was the

1 one that had it wrong. We anticipate that we could get  
2 about 300,000 more a day in production and 300 million  
3 more a day in EUR reserves.  
4 CHAIRMAN LAY: Clarify again.  
5 THE WITNESS: Okay.  
6 CHAIRMAN LAY: Not 300 million a day. Three  
7 hundred--  
8 THE WITNESS: Yeah. It's 300,000 in production  
9 daily from that, MCFD, and three hundred million in EUR's.  
10 I'm glad you caught that. I'd a looked kinda dumb on the  
11 record with that one out there.  
12 COMMISSIONER MARTIN: Okay. Thank you.  
13 CHAIRMAN LAY: Other questions? I just wanted  
14 to clarify. I thought you'd found a fantastic field.  
15 THE WITNESS: Thank you.  
16 MS. RAUPP: If I could, Chairman, I'd like to  
17 mark this as the next exhibit, the drawing.  
18 COMMISSIONER MARTIN: Any objections?  
19 (WHEREUPON, said document was  
20 identified as Exhibit No. 10 and  
21 is attached hereto and made a part  
22 hereof.)  
23 CHAIRMAN LAY: No other questions for the  
24 witness? The witness may be excused.

1 (Witness excused.)  
2 CHAIRMAN LAY: Call your next witness.  
3 MS. RAUPP: I have nothing further, Chairman.  
4 CHAIRMAN LAY: Anything for the record before we  
5 go off the record? Okay. Let's go off the record.  
6 (WHEREUPON, a brief recess was had.)  
7 CHAIRMAN LAY: We're back on the record. Do I  
8 have a motion?  
9 COMMISSIONER RADABAUGH: I have a motion,  
10 Mr. Chairman. I make a motion to grant Jay-Bee Oil & Gas,  
11 Inc., an exception to Rule 39CSR1.4.2 for the Larry 3U  
12 well, 4709502334, to extend the lateral by 179 feet beyond  
13 the approved length of the last hearing, therefore, having  
14 an approximate distance of 1957 feet between the Larry 3U  
15 and Antero's Rymer 4H well.  
16 COMMISSIONER GUM: And I'd like to second that  
17 motion.  
18 CHAIRMAN LAY: We have a motion and a proper  
19 second. Any further discussion? All those in favor of  
20 the motion, aye? Opposed, nay? Motion carries.  
21 (WHEREUPON, the motion passed.)  
22 CHAIRMAN LAY: Would you be so kind as to  
23 prepare a draft order for us?  
24 MS. RAUPP: I certainly will. Thank you,

1 Chairman.  
2 CHAIRMAN LAY: Would you submit it, not only to  
3 the Commission, but to Mr. Foster as well?  
4 MS. RAUPP: I will. And I also agreed to let  
5 Mr. Christianson review it before I submit it to you, if  
6 that's acceptable.  
7 CHAIRMAN LAY: That's fine. Anything further  
8 for the record? Okay. We'll go off the record then.  
9 (WHEREUPON, the hearing was adjourned.)  
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## REPORTER'S CERTIFICATE

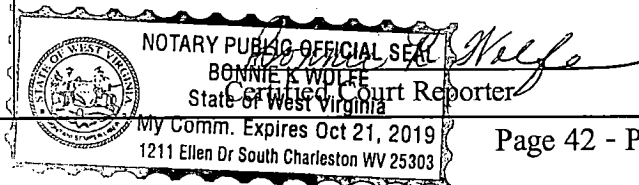
STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, to wit:

I, BONNIE K. WOLFE, Certified Court Reporter and  
Notary Public of West Virginia, do hereby certify that the  
foregoing is, to the best of my skill and ability, a true  
and accurate transcript of all the proceedings as set  
forth in the caption hereof.

Given under my hand this 1st day of August,  
2016.

My commission expires October 21, 2019.





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BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY  
JAY-BEE OIL & GAS, INC. FOR AN  
EXCEPTION TO RULE 39CSR1.4.2  
FOR THE DRILLING OF THE WELL  
IDENTIFIED AS THE LARRY 3U,  
API: 47-095-02334. JAY-BEE IS  
PROPOSING TO EXTEND THE LATERAL  
ON A PREVIOUSLY APPROVED LOCATION.  
THE LARRY 3U WELL IS TO BE  
LOCATED IN ELLSWORTH DISTRICT,  
TYLER COUNTY, WEST VIRGINIA.

DOCKET NO. 241  
CAUSE NO. 230

Transcript of proceedings had or testimony  
adduced in the above-styled matter before the Oil and Gas  
Conservation Commission in a hearing held at the  
Department of Environmental Protection, 601 57th Street,  
Southeast, Charleston, Kanawha County, West Virginia, on  
the 27th day of July, 2014, at 1:00 p.m.

ORIGINAL

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**BONNIE K. WOLFE**  
Certified Court Reporter  
1211 Ellen Drive  
South Charleston, West Virginia 25303  
(304) 744-4318

BEFORE: Barry K. Lay, Chairman  
Robert Radabaugh, Commissioner  
Anthony Gum, Commissioner  
James Martin, Commissioner  
Lisa McClung, Commissioner

APPEARANCES:

Greg Foster, Counsel for OGCC  
Carrie Brooks, Staff

ON BEHALF OF JAY-BEE OIL AND GAS, INC.:

Valerie H. Raupp, Esquire  
Lewis Glasser, Casey and Rollins  
Post Office Box 1746  
Charleston, West Virginia 25326-1746

ON BEHALF OF ANTERO:

Roger Christianson, Counsel for Antero



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<u>EXHIBITS</u>	<u>IDENTIFIED/RECEIVED</u>
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1 CHAIRMAN LAY: Before the Oil and Gas  
2 Conservation Commission of the State of West Virginia in  
3 the matter of the request by Jay-Bee Oil & Gas, Inc. for  
4 an exception to Rule 39CSR1.4.2 for the drilling of the  
5 well identified as the Larry 3U, API: 47-095-02334.  
6 Jay-Bee is proposing to extend the lateral on a previously  
7 approved location. The Larry 3U well is to be located in  
8 Ellsworth District, Tyler County, West Virginia.

9 This is Docket No. 241, Cause No. 230. Let  
10 the record show that present are members of the  
11 Commission, James Martin, Anthony Gum, Robert Radabaugh  
12 and Barry Lay. Also present is Greg Foster, counsel, and  
13 Carrie Brooks from Staff.

14 I'd like to place of record as Exhibit 1 a  
15 copy of the Notice of Hearing along with certified mail  
16 cards, Exhibit 2, confirmation of the posting of the  
17 meeting on the Secretary of State's website, Exhibit 3,  
18 copy of the Notice of Publication with the Tyler Star  
19 News.

20 Exhibit 4 is a letter dated June 14, 2016,  
21 from Jay-Bee Oil & Gas, Inc. requesting a hearing to  
22 extend the lateral, signed by Shane Dowell.

23 And finally, Exhibit 5 is a copy of the  
24 amended pages of the Application and a copy of the amended

1 plat.

2 (WHEREUPON, said documents were  
3 identified as Exhibits Nos. 1-5 and  
4 are attached hereto and made a part  
5 hereof.)

6 CHAIRMAN LAY: Commission will now take  
7 appearances.

8 MS. RAUPP: Commissioner, my name is Valerie  
9 Raupp from Lewis, Glasser, Casey & Rollins. I'm here on  
10 behalf of Jay-Bee Oil & Gas.

11 MR. DOWELL: Shane Dowell, Office Manager at  
12 Jay-Bee Oil & Gas, representing Jay-Bee Oil & Gas.

13 MR. JACKSON: I'm David Jackson O Jackson  
14 Surveying. I do the survey work for Jay-Bee Oil & Gas.

15 MR. KESTERSON: I'm Donald C. Kesterson. I'm  
16 consulting petroleum geologist doing consulting work for  
17 Jay-Bee.

18 MR. CHRISTIANSON: I'm Roger Christianson. I'm  
19 with Antero Resources.

20 CHAIRMAN LAY: Okay. Any other housekeeping  
21 issues?

22 MS. RAUPP: Yes. Commissioner, I would ask the  
23 Commission to make a motion to incorporate the transcript  
24 of the prior exception hearing which was Docket No. 240,

1 Cause No. 230, which was the original request for  
2 exception.

3 There was a hearing on June 13th and the  
4 Order granting that exception as Exhibit 6 to this matter  
5 and so that we could utilize the testimony and information  
6 from that original hearing in this matter.

7 CHAIRMAN LAY: There are no objections, or are  
8 there objections, I guess?

9 COMMISSIONER RADABAUGH: No, sir.

10 CHAIRMAN LAY: If not, we'll enter the previous  
11 transcript as Exhibit 6.

12 (WHEREUPON, said document was  
13 identified as Exhibit No. 6 and  
14 is attached hereto and made a part  
15 hereof.)

16 CHAIRMAN LAY: I'd like to also supplement the  
17 record--

18 MR. FOSTER: Does this contain the Order  
19 granting it, too?

20 MS. RAUPP: It does not, but I do have that as  
21 an exhibit. I would amend my motion to include that  
22 Order.

23 MR. FOSTER: Well, I think you can say you  
24 already included it.

1 MS. RAUPP: Okay. I apologize. I do have a  
2 copy of the Order entered in that matter that I would also  
3 move to be Exhibit 7.

4 CHAIRMAN LAY: Exhibit 7? No objections? We'll  
5 enter the Order as Exhibit 7. I'd like to also amend the  
6 record to say that Lisa McClung has joined us as a member  
7 of the Commission to the hearing, so she is also here  
8 representing the Commission.

9 (WHEREUPON, said document was  
10 identified as Exhibit No. 7 and  
11 is attached hereto and made a part  
12 hereof.)

13 CHAIRMAN LAY: That being the case, Ms. Raupp,  
14 would you proceed with your case?

15 MR. RAUPP: Yes, Chairman. Thank you. Chairman  
16 Lay and Commissioners, in this case just as we set forth  
17 briefly in the Motion is a second exception request for  
18 the Larry 3U deep well. The Larry 3U deep well has an  
19 active permit granted April 20, 2016.

20 An exception was granted by this Commission  
21 to extend the lateral leg within the three thousand foot  
22 buffer of the bottom hole, but the lateral leg surrounding  
23 the Rymer 4HD well and the Moe 3U well. That exception  
24 was granted, and the modification to the permit was

1 submitted and is currently pending.

2 In preparation for that original hearing on  
3 June 13th, it came to light and evidence will show that  
4 Jay-Bee believed an additional extension would benefit the  
5 development and maximization of production of gas in this  
6 area. So they submitted a second exception request also  
7 dated June 14, 2016. That is the exception that we're  
8 here for today.

9 The extension is approximately 179 feet,  
10 evidence will show, and someone's here to testify as to  
11 the exact length of an extension of the prior exception.  
12 And we believe-- And Jay-Bee believes that this will show  
13 that this will maximize the development of oil and gas  
14 resources and prohibit waste in this area.

15 CHAIRMAN LAY: Would you call your first  
16 witness?

17 MS. RAUPP: I'd call Shane Dowell, please.

18 (Witness sworn.)

19 THEREUPON came

20 SHANE DOWELL

21 called as a witness for the Applicant herein, being first  
22 duly sworn according to law, testified as follows:

23 DIRECT EXAMINATION

24 BY MS. RAUPP:

1           Q     Would you state your full name for the record,  
2     please?

3           A     Shane Dowell.

4           Q     And did you testify at the June 13th hearing for  
5     an exception for the Larry 3U well in this matter?

6           A     Yes.

7           Q     At that time, did you take us through your  
8     background experience in the field and education?

9           A     Yes.

10          Q     And your experience with gas permitting in,  
11     particularly, horizontal wells?

12          A     Yes.

13          Q     Has anything changed with regard to your  
14     experience or credentials in that matter?

15          A     No.

16          Q     You continue to be familiar with the application  
17     process for drilling horizontal wells--

18          A     Yes.

19          Q     --gas well? Are you familiar with the  
20     regulations that govern those applications?

21          A     Yes.

22          Q     And did you submit the Applicant for the Larry  
23     3U well?

24          A     Yes.

1 Q And was that permit granted on April 20, 2016?

2 A Yes.

3 Q And to your recollection, was that a part of the  
4 record in the prior exception hearing?

5 A Yes. It was.

6 Q If I represent to you that it was admitted as  
7 Exhibit 9, would that--

8 A That sounds right.

9 Q Would you agree with that?

10 A Yes.

11 Q Now, was the permit granted?

12 A Yes. It was.

13 Q Was it complete and accurate?

14 A Yes.

15 Q And have you received any notices of any  
16 problems since the last hearing on June 13th with regard  
17 to that permit or the proposed modification to that  
18 permit?

19 A No. I have not.

20 Q Are you familiar with the exception requested at  
21 the June 13th hearing?

22 A Yes.

23 Q And I'm showing you Exhibit 7 from the prior  
24 hearing. I'm going to ask you to look at this Exhibit 7.



1 Does that look familiar to you?

2 A Yes. It does.

3 Q And is that the Order which contains the  
4 findings in the Order of the Commission in the prior  
5 exception hearing?

6 A Yes. It is.

7 Q What happened after you-- Did you submit a  
8 modification request with regard to that first exception  
9 hearing to the Office of Oil & Gas?

10 A Yes. I did.

11 Q Ask you to look at that. Would you tell me what  
12 this is?

13 A This is my original submission showing the last  
14 exception that was granted and adjusting the plats and  
15 distances.

16 Q So is this plat and this request for  
17 modification based on that Order in the exception hearing  
18 that we previously identified as Exhibit 7?

19 A Yes. It is.

20 Q And this was presented to the Horizontal Well  
21 Permitting office. Did you understand that was a required  
22 step after the last--

23 A Yes.

24 Q --hearing? All right. Did you-- Could I see

1 Exhibit 4, please? Are you familiar with this document?

2 A Yes.

3 Q And did you draft this document?

4 A Yes. I did.

5 Q Did you sign this document? Is that your  
6 signature?

7 A Yes. I did.

8 Q Is this-- Could you tell us what this is?

9 A This is the request for additional extension and  
10 exception modification from the previous exception hearing  
11 approval to extend our leg.

12 Q Were any other modifications to the Larry 3U  
13 well proposed in this request?

14 A I'm sorry. Say that again.

15 Q Were there any other changes to the Larry 3U  
16 horizontal leg proposed with regard to this or does it  
17 just--

18 A No.

19 Q --simply add a leg to the end?

20 A Only the extension.

21 Q Okay. And how far-- What's the difference  
22 between the exception you're seeking now and the exception  
23 that was previously granted?

24 A This extension goes -- allows us to go within

1 410 foot of our boundary at roughly 1,957 feet from the  
2 Rymer 4HD bottom hole.

3 Q Other than that additional extension of the  
4 lateral length, does the new proposed Larry 3U location  
5 horizontal leg meet all well location restrictions?

6 A Yes.

7 Q Under the exception sought at this hearing, is  
8 the Larry 3U further than 400 feet from the unit boundary?

9 A Yes.

10 MS. RAUPP: That's all I have at this time.

11 CHAIRMAN LAY: Questions for the witness?

12 Members of the Commission?

13 COMMISSIONER GUM: Not at this time.

14 COMMISSIONER MARTIN: I have some, Mr. Chairman.  
15 I wasn't at the earlier hearing, so a little mind curve  
16 problem here.

17 EXAMINATION

18 BY COMMISSIONER MARTIN:

19 Q Just so I've got the facts right at the time--  
20 The original permit for this well was issued on April  
21 20th, 2016.

22 A Yes.

23 Q Is that right? There was a hearing request and  
24 a hearing that was held on June 13th before this

1 Commission to extend the lateral.

2 A Yes.

3 Q Right? What was the original length of the  
4 permit that was issued on April 20th? What was the  
5 original length of the lateral? Well, maybe the question  
6 would be how much were you adding -- were you extending it  
7 in the previous hearing?

8 A I would have to-- I would have to reflect on  
9 that. I'm not really sure what the difference was from  
10 the previous--

11 MS. RAUPP: If I may, there may be someone else  
12 here who could better answer that, if that's--

13 COMMISSIONER MARTIN: That's fine.

14 MS. RAUPP: --helpful.

15 CHAIRMAN LAY: If that's all right with--

16 COMMISSIONER MARTIN: Yeah. That's fine.

17 BY COMMISSIONER MARTIN:

18 Q And probably the other questions I had-- I was  
19 curious how much lateral length you're requesting this  
20 time.

21 A This time it's an additional, roughly,  
22 approximately, 179 feet.

23 Q The-- So the hearing was held on the first  
24 extension request on June 13th.

1           A     Yes.

2           Q     And there was a request to extend it further the  
3 next day, June 13th?

4           A     Yes.

5           Q     Is there-- Can you explain? Is someone else  
6 going to address how that occurred or why that occurred?

7           A     No. I can explain it. Yeah. We initially had  
8 the permit, of course, in hand. And we were, of course,  
9 made aware of the presence of the Rymer 4HD. So we  
10 extended for an exception hearing based off of the  
11 original setup, original plat.

12                     During our review in preparation for the  
13 exception hearing on June 13th, we realized we could  
14 extend the leg even further to better capture natural gas  
15 under the surface. Of course, my geologist can explain  
16 that a little bit further, but--

17                     So during our preparation, we realized we  
18 could extend it farther. So we submitted the exception  
19 after the -- the modification after that exception hearing  
20 was completed.

21           Q     So basically at the time of the June 13th  
22 hearing, you knew you needed additional footage? You all  
23 knew that then?

24           A     Just found out, yes.

1           Q     The modification that came, I guess, as a result  
2 of the June 13th hearing, that hasn't been approved yet?

3           A     It has been approved by the Commission.

4           Q     I mean the permit itself, the Office of Oil and  
5 Gas.

6           A     It is currently in Laura's hands. Correct.

7           Q     And can you tell me how close the new bottom  
8 hole location is to the well that's in question?

9           A     Yeah.

10          Q     Maybe you already touched on that.

11          A     It is approximately 1,957 feet from their bottom  
12 hole.

13          Q     From which well?

14          A     Of the Rymer 4HD.

15          Q     And was there another well that was involved  
16 also that you were within 3,000 feet of?

17          A     Our own Moe 3U.

18          Q     How close are you to that one?

19          A     I do believe it's approximately 2,980 feet from  
20 the landing point of that well.

21          Q     So the closest you are is the 2,980?

22          A     Yes.

23          Q     That's from bottom hole location of the Larry  
24 well to the--

1           A     I believe it's from the top hole location. I  
2     would probably have to defer to my surveyor to confirm  
3     that, but I believe it's from the top hole's location to  
4     the landing point of the Moe 3U, is the distance.

5           COMMISSIONER MARTIN: okay. Thank you.

6           CHAIRMAN LAY: Any other questions?

7           MS. RAUPP: Could I ask one follow-up that may  
8     clear up--

9           CHAIRMAN LAY: Yes.

10          MS. RAUPP: --some of Mr. Martin's questions?

11                   DIRECT EXAMINATION (CONTINUED)

12          BY MS. RAUPP:

13          Q     Did you have any business reasons for waiting to  
14     request the additional footage, not requesting it at the  
15     June 13th hearing?

16          A     Business reasons? I mean, we have a top hole  
17     rig prepped and ready for the drilling of the well itself.  
18     But outside of that--

19          Q     Was there anybody else that you wanted to  
20     discuss the change in--

21          A     Oh. I did want to discuss with Antero. We were  
22     in negotiations with Antero or discussions with Antero on  
23     the bottom hole location and the proximity to the unit  
24     boundary and to their well. And there was a certain

1       footage that we were in discussions with that were never  
2       really resolved at that point.

3             Q     And so you wanted to take additional time to--

4             A     Correct.

5             Q     --see if you could go through those issues?

6             A     Yes.

7             Q     And are you requesting at this exception  
8       hearing, is there any additional point that was not  
9       resolved in the June 13th hearing? Any additional point  
10      on the Moe 3U well that would be within 3,000 feet of the  
11      Larry 3U well? Anything that was not addressed in the  
12      June 13th hearing or the Order from that hearing, which  
13      are Exhibits 6 and 7 to this hearing?

14            A     There are no more.

15                   MS. RAUPP: That's all I have.

16                               EXAMINATION

17                   BY COMMISSIONER McCLUNG:

18             Q     One question. So were you able to satisfy  
19      Antero or is it still--

20             A     We have basically ended discussion at that  
21      point, and there was no resolution either way. There was  
22      no specific documents or anything that were devised one  
23      way or another. It was just a discussion.

24                   CHAIRMAN LAY: Other questions? Okay. Witness



1 may be excused.

2 (Witness excused.)

3 CHAIRMAN LAY: You can call your next witness,  
4 please.

5 MS. RAUPP: Thank you, Chairman. I'd call David  
6 Jackson to the stand, please.

7 (Witness sworn.)

8 THEREUPON came

9 DAVID L. JACKSON

10 called as a witness by the Applicant herein, being first  
11 duly sworn according to law, testified as follows:

12 DIRECT EXAMINATION

13 BY MS. RAUPP:

14 Q Mr. Jackson, did you testify at the original  
15 hearing on June 13th in this matter?

16 A I did.

17 Q Sorry. Could you state your full name for the  
18 record?

19 A David L. Jackson.

20 Q And I believe at the June 13th hearing you took  
21 us through your background experience in the field and  
22 educational. Has anything changed since that time?

23 A No.

24 Q Are you still a professional surveyor?

1 A Yes.

2 Q Okay. In West Virginia?

3 A Yes.

4 Q In preparation for this hearing and the June  
5 13th hearing, did you become familiar with the Application  
6 and the Permit for the Larry 3U--

7 A Yes.

8 Q --well? Okay. And did you draft the plat that  
9 was approved in the prior exception hearing?

10 A I did.

11 Q I'll show you what was Exhibit 8 to the June  
12 13th hearing, which is Exhibit 6 to these proceedings. Do  
13 you recognize this document?

14 A I do.

15 Q Is this the plat that was approved and the  
16 distances that were approved in the prior hearing?

17 A Yes. It was.

18 Q Okay. And what is the distance from the Larry  
19 3U bottom hole to the Rymer 4HD bottom hole in that  
20 hearing?

21 A It's 2,136 feet.

22 Q And what is the distance from the unit boundary  
23 for the Larry 3U bottom hole to the unit boundary?

24 A Five hundred and eighty-two feet.

1           Q     Okay. And is it your-- Were you asked to  
2     prepare a new plat for this second exception hearing?

3           A     I was.

4           Q     Could you describe this for us?

5           A     Yes. This is an extension of the Larry 3U leg.  
6     It goes an additional 179 feet from the bottom hole on the  
7     plat that was granted in the exception. It goes to within  
8     410 feet from the unit boundary line, and it is now 1,957  
9     feet from the Rymer bottom hole location.

10          Q     The Rymer 4HD?

11          A     That's correct.

12          Q     Okay. And is that-- Does the proposed  
13     extension for this exception hearing come within 3,000  
14     feet of the Moe 3U or any proposed extension of that?

15          A     Yes. It comes within 2,980 feet. The leg of  
16     the Larry 3U is 2,980 feet from the Moe 3U landing point.  
17     And the bottom hole of the Larry 3U is like 3,062 feet  
18     from the leg of the Moe 3U.

19          Q     Okay. I'm sorry. I didn't phrase my question  
20     properly. Does the extension that Jay-Bee is seeking  
21     today, not the exception that was previously granted--

22          A     Mm-hum.

23          Q     Is there anything about the exception that's  
24     presented today that is within 3,000 feet of any deep

1 well, including the Moe 3U, other than the Rymer 4HD that  
2 you've already identified for us?

3 A No. There's no changes from the original  
4 location that was permitted or approved.

5 Q Okay. Now, based on your experience and your  
6 knowledge of the permitting regulations and in the  
7 permitting standards, do you believe this plat is complete  
8 and accurate under the regulations for the permitting of a  
9 deep horizontal well?

10 A Yes.

11 MS. RAUPP: I would ask that this be marked as  
12 Exhibit 8.

13 CHAIRMAN LAY: Any objections? We'll enter the  
14 exhibit as Exhibit 8.

15 (WHEREUPON, said document was  
16 identified as Exhibit No. 8 and  
17 is attached hereto and made a part  
18 hereof.)

19 BY MS. RAUPP:

20 Q Is the proposed new exception to Larry 3 bottom  
21 hole, just to confirm, more than 400 feet from the unit  
22 boundary?

23 A Yes. It is.

24 Q Could you take a look at this document that I've

1 placed in front of you? Do you recognize this?

2 A Yes.

3 Q And did you draft this or survey it?

4 A Yes. I did.

5 Q Is this your signature in the corner, the  
6 lefthand corner?

7 A Yes.

8 Q Could you explain to us what this is?

9 A This is an exhibit showing the two-mile area  
10 around the Larry 3U top hole leg and bottom hole, and it  
11 also shows a 3,000 foot distance in green around the leg  
12 of the Larry 3U. It also-- It shows the distance between  
13 the Larry 3U bottom hole and the Antero Rymer 4H as 1,957  
14 feet. And it shows the distances over to the Moe 3U leg.

15 Q And the Moe 3U leg is not at issue at this  
16 hearing, but is it different in this drawing than it is  
17 for the Moe 3U?

18 A In this drawing, it shows an extension, a  
19 proposed extension to the leg to get it 410 feet from the  
20 lease line.

21 Q And has that been applied for separately and  
22 pending separately?

23 A Yes.

24 Q So you included this out of an abundance of

1       caution to be clear with the Commission as to every  
2       possible pending well within 3,000 feet?

3           A     That's correct.

4           MS. RAUPP: I'd ask that this be marked as  
5       Exhibit 9.

6           CHAIRMAN LAY: Any objections? Okay. We'll  
7       enter it as Exhibit 9.

8                   (WHEREUPON, said document was  
9                   identified as Exhibit No. 9 and  
10                  is attached hereto and made a part  
11                  hereof.)

12          MS. RAUPP: I have no further questions.

13          CHAIRMAN LAY: Okay. Questions? Questions from  
14       members of the Commission?

15                               EXAMINATION

16           BY COMMISSIONER RADABAUGH:

17           Q     Oh, just one. My math's not real good, so bear  
18       with me here. On the extension, you stated that the new  
19       extension's going to be 179 feet.

20           A     Right.

21           Q     But when I look at the plat that was used at the  
22       last hearing, it was at 582 feet from the unit boundary.  
23       This time, you've got 410 feet unit boundary. If I  
24       subtract the two, I get 172 feet.

1           A     That's correct. It has to do with the angle of  
2     the property line--

3           Q     Okay.

4           A     --in relationship to being perpendicular as  
5     opposed to the lengthening of the leg. So the actual  
6     lengthening of the leg is from-- I think it was 7,132  
7     feet to 7,311 feet.

8           COMMISSIONER RADABAUGH: Okay. Some of that  
9     surveyor stuff. All right. I'm good.

10                               EXAMINATION

11           BY COMMISSIONER MARTIN:

12           Q     Mr. Jackson, I guess you hear my earlier  
13     question that I'd asked. Do you know what the extent that  
14     the length was on the previous hearing?

15           A     Yes. It was 874 feet. It went from, I believe  
16     it was, 6,258 to 7,132 feet.

17           Q     Do you know why it was extended the first time?

18           A     Originally, a plat was submitted for the 7,132  
19     feet, and we became aware of the Antero Resource Rymer 4H  
20     or the 4 well. And so basically, we submitted a plat that  
21     would be 3,000 feet from the bottom hole from the Antero  
22     well, which gave us a length of 6,258 feet.

23                       So the last hearing was to extend it to the  
24     original well plat, length of 7,132 feet.

1 Q And so this hearing is to extend it an  
2 additional 179 feet. Right?

3 A Yes, sir. To get it to within 410 of the unit  
4 boundary line.

5 Q Do you know what the orientation is of the  
6 Antero Rymer 4H?

7 A Not right offhand.

8 Q But the closest point to it is the surface  
9 location from the bottom of the location of this one?

10 A The closest point is from bottom hole to bottom  
11 hole.

12 Q On your map, you show a measurement to the top  
13 hole.

14 A Pardon?

15 Q You don't show the orientation to the-- I'm  
16 sorry. That's the bottom hole. So it's 1957--

17 A Yes, sir.

18 Q --on the bottom hole.

19 A Yes, sir.

20 Q I'm sorry. I was looking at the top hole.

21 Thank you.

22 A Yes, sir.

23 EXAMINATION

24 BY CHAIRMAN LAY:



1           Q     Only question I have is just to make sure that  
2     I'm clear, and you may not be the right person. We may  
3     have to go back to Mr. Dowell.

4                     On your plat, the proposed unit is outlined  
5     in red. Is that correct the way you have it drawn?

6           A     Yes, sir.

7           Q     So the-- It's hard to distinguish in here, but  
8     from your plat, then I'm assuming that the 34.94 acre  
9     Fletcher tract to the south is not part of the unit, or is  
10    part of that tract included in this unit?

11          A     It is not a part of the unit.

12          Q     Okay. However, the 100 acre West Virginia DNR  
13    tract is part of the unit on the southeastern side?

14          A     Okay. That is-- Yes, a part of the 100 acres,  
15    not the entire 100 acres.

16          Q     Okay. Okay. And you were provided the  
17    information on the lease boundaries from your client,  
18    Jay-Bee?

19          A     That's correct. Except for-- What I would do,  
20    they would give me an outline of the lease boundaries, and  
21    I would adjust it if there was property lines involved. I  
22    would adjust it to the field evidence for the actual  
23    property lines. In this case, I adjusted it to the field  
24    evidence that I found for the Fletcher 34.94 acre property

1 line that I found on the ground.

2 CHAIRMAN LAY: Okay. Okay. I think that's all  
3 the questions I have. Any other questions?

4 EXAMINATION

5 BY COMMISSIONER RADABAUGH:

6 Q One, since you're talking about the Fletcher.  
7 Is that Fletcher, is it included in the Antero unit?

8 A I can't say for their unit, but I do believe  
9 that it is shown on their plat. So I don't know whether  
10 they have lease on it or not, but I noticed that it was  
11 shown on their well plat.

12 Q So Jay-Bee does not have it under lease then?

13 A No, sir, not to my knowledge.

14 EXAMINATION

15 BY CHAIRMAN LAY:

16 Q I'll go back to clarify this just for the record  
17 then. Then based on the evidence in your plat, the  
18 proposed drilling of this well from top hole to the toe,  
19 there is in all areas at least 400 feet from the unit  
20 boundary.

21 A Yes, sir. That is correct. That is represented  
22 on the plat in a green line. That shows the 400 foot  
23 distance from the leg. And then in the case of the  
24 property line, which is the north line of the Fletcher

1 tract, I show an actual distance on the plat of 410 feet  
2 based upon my field measurements.

3 CHAIRMAN LAY: Any other questions?

4 EXAMINATION

5 BY COMMISSIONER McCLUNG:

6 Q Since this is a different witness-- So you're  
7 not aware of Antero objecting to this new location at all?

8 COMMISSIONER RADABAUGH: He's setting right  
9 there (indicating).

10 MR. CHRISTIANSON: No. Antero-- The map  
11 provided appears to be the same map that we were provided  
12 previously, and we have not objected to this location.

13 CHAIRMAN LAY: Okay. Any other questions?  
14 Okay. Witness may be excused.

15 (Witness excused.)

16 CHAIRMAN LAY: Let's go off the record for a  
17 second.

18 (WHEREUPON, a brief discussion was  
19 had off the record.)

20 CHAIRMAN LAY: Ms. Raupp, do you wish to call  
21 your next witness?

22 MS. RAUPP: Yes. Thank you, Chairman. I would  
23 like to call Don Kesterson.

24 (Witness sworn.)

1 THEREUPON came

2 DONALD C. KESTERSON

3 called as a witness on behalf of the Applicant herein,  
4 being first duly sworn according to law, testified as  
5 follows:

6 DIRECT EXAMINATION

7 BY MS. RAUPP:

8 Q Would you state your full name for the record,  
9 please?

10 A Donald C. Kesterson.

11 Q Mr. Kesterson, did you testify at the June 13th  
12 hearing?

13 A Yes, ma'am.

14 Q At that time, did you take us through your  
15 background in the field and education?

16 A Yes, ma'am.

17 Q Has anything changed since that time?

18 A No, ma'am.

19 Q Just additional experience?

20 A Older and a few more scars.

21 Q You still do work as a petroleum geologist?

22 A Yes, ma'am.

23 Q As part of that, can you tell us generally what  
24 you do?

1           A     I'm involved with design, directional steering,  
2     tract design and production of really all wells but  
3     currently with respect to Marcellus and Utica wells.

4           Q     And are you familiar with the Larry 3U permits  
5     and exception granted on June 13th?

6           A     Yes, ma'am.

7           Q     And during the June 13th hearing, did we talk  
8     about the type of well work described in that Application?

9           A     Yes, ma'am.

10          Q     Do you understand that's the same type of well  
11     work? It would be the same well work with the granting of  
12     this extension?

13          A     Yes, ma'am.

14          Q     At the original hearing-- And I apologize we  
15     did not make it an exhibit. I'd ask you to do it again.  
16     --you drew us a picture that kind of described how the  
17     bottom hole of this Larry 3U well and the Antero Rymer 4HD  
18     well as being toe to toe, the bottom holes, and kind of  
19     drew us a depiction of how the well work would occur based  
20     on your review of those permits and your knowledge of the  
21     industry. Could you see if you could replicate that to  
22     some extent for us so we could talk about it?

23          A     (Witness complies.) I've drawn out the two  
24     laterals showing them as permitted, toe to toe to each

1 other. And when you go in to frack these wells, generally  
2 speaking most companies will not actually complete the toe  
3 in either well. That's the 1957 feet.

4 What you'll do is you'll come back and  
5 you'll run-- For your first stage, you'll run in the hole  
6 with equipment and you'll perforate back from the shoe.  
7 It will vary in distance, but for argument's sake, we'll  
8 say it's about 20 feet. So in each well, I would--

9 I don't know what Antero's practice is, but  
10 I'm sure it's comparable as industry standards. You'll  
11 complete that well, and you'll do your first frack stage  
12 right there. You'll have a series of generally four  
13 clusters of perforations in that first stage. But your  
14 first initial shots will not be right at the float shoe.  
15 They'll be back at least twenty feet.

16 Q And we are discussing, just so the record's  
17 clear in this case-- I believe we discussed it last time.  
18 --fracking is the well work that's proposed for the Larry  
19 3U in the Utica/Point Pleasant formation?

20 A Yes, ma'am.

21 Q Utica formation.

22 A Generally, with horizontals, we drill the  
23 lateral length and come back in and design the frack  
24 stages as per the amount of complete-able lateral that has

1       been drilled. And then we'll lay those out and frack, and  
2       we'll vary the size of the length of each stage.

3                   And that number has been dropping over the  
4       last several years as we learn more about the formations.  
5       Some companies, when we started, we were at 300, 350 feet  
6       in the Marcellus. We're now down to under 200 feet on a  
7       completion stage. And that was part of the reason behind  
8       the 179 feet, is we were gaining almost a full stage of  
9       interval for completion.

10           Q       Okay. We'll talk about that a little bit more.  
11       But can you, for the purposes of this drawing, show us  
12       what the Larry 3U proposed well work would look like if  
13       you could-- I understand it's a rough drawing.

14           A       Right.

15           Q       But you would track horizontally, it looks like  
16       is what you've drawn?

17           A       What we do, again, the frack stages go out like  
18       this (indicating). I'm sure when Antero did theirs, they  
19       had the same pattern. You perforate along the horizontal,  
20       complete-able leg and you build various stages with a  
21       series of eight drop ball plugs and perforations, and you  
22       move from the toe back to the heel of the well along the  
23       way.

24                   The longer the lateral, the more stages you

1 can complete. And in today's drilling environment,  
2 frankly the drilling of the lateral and the completion is  
3 now the more economical portion of the well as opposed to  
4 the top hole drilling with the various strings of casing  
5 and cementing process that has to go into keeping these  
6 wells safe.

7 Q So although we don't know precisely what  
8 Antero's practices are, the industry standard would be,  
9 based on your experience, to frack out horizontally. What  
10 happens-- And that's what's depicted in this picture?

11 A Yes.

12 Q Just based on industry standards?

13 A Yes.

14 Q So what happens to this acreage in the middle,  
15 the gas left in the middle.

16 A Okay. As I discussed in the previous hearing,  
17 this interval that's in between the two wells is left as  
18 stranded reserves. They will not be completed.

19 It would be un-economical under current  
20 conditions for anybody to go in and drill even a vertical  
21 well to attempt to get those reserves. So they'll be  
22 stranded. So the extension of the lateral will actually  
23 utilize the reserves that are then had you not extended  
24 that lateral.



1           Q     Do you think that extending the lateral of the  
2     Larry 3U would have an effect on production from the Rymer  
3     Unit 4HD?

4           A     Under any industry engineering practice that I  
5     can see at this point in time, I don't see how it's  
6     possible because the fracks go out in a lateral manner.  
7     Since these wells are toe to toe, the distance between the  
8     two bottom hole locations represent stranded reserves or  
9     uncomplete-able reserves. So that distance will just  
10    never be touched. It shouldn't even impinge on the  
11    formation-producing pressure while both wells are in  
12    production.

13          Q     So what is the benefit of this additional 179  
14    approximate feet? What is the benefit to the production,  
15    and how does it maximize it? Have you quantified that?

16          A     Well, I've attempted to estimate it. They don't  
17    like geologists to quantify too much.

18          Q     Okay. Apologize.

19          A     But they like us to estimate. We believe that  
20    the extension of this lateral could amount to  
21    approximately 300 mcf a day production and as much as 300  
22    bcf's of ultimate recoverable reserves over the life of  
23    that well. And it will also drain the additional portion  
24    of the lateral.

1 Q That addition 179 feet?

2 A 179 feet. Yes, ma'am.

3 Q Do you have an opinion as a--

4 CHAIRMAN LAY: Excuse me. I want to make sure I  
5 heard correctly. You said 300 bcf?

6 THE WITNESS: Total for the EUR's. We are  
7 dealing in today's world-- I see where you're at. I made  
8 a mistake as far as that goes. What we're looking at is:  
9 per thousand foot of lateral, we're looking in the Utica  
10 to be maybe as much as 1.8 bcf recoverable. So I said--  
11 I gave you the wrong number, so I stand corrected on that.

12 You would get a portion of that related to  
13 the 179 feet, which I'd have to do the math on that. But  
14 it should be about 300 million cubic feet of ultimate  
15 recoverable reserves.

16 CHAIRMAN LAY: Okay. Thanks for the  
17 clarification.

18 BY MS. RAUPP:

19 Q Do you have an opinion, as a petroleum  
20 geologist, as to whether or not the proposed second  
21 extension of the Larry 3U in a variance would maximize  
22 development of oil and gas resources?

23 A Yes.

24 Q What--

1           A     Well, to the extent of the 179 feet, we will  
2     gain that much reserves in the well.

3           Q     And in your opinion as a petroleum geologist,  
4     would the location allow Jay-Bee to reach some reserves  
5     that would be left in place or untapped under the deep  
6     well spacing rule without the variance?

7           A     Yes, ma'am.

8           Q     And we've talked about why previously. Correct?

9           A     Yes, ma'am.

10          Q     Conversely, if the exception's not granted,  
11     would the reserves be left in place?

12          A     Yes, ma'am.

13               MS. RAUPP: That's all I have at this time.

14               CHAIRMAN LAY: Questions? Questions from  
15     members of the Commission?

16                               EXAMINATION

17               BY COMMISSIONER MARTIN:

18           Q     Again, Mr. Chairman, I have a couple here. I'm  
19     assuming-- It's a little bit hard to tell from the plats  
20     exactly, and I wasn't at the last hearing.

21                       The new location doesn't intersect any  
22     different mineral owners? No new mineral tracts as a  
23     result of the 179 foot lateral extension? Would you know  
24     that?

1           A     Frankly, Mr. Martin, I'm not aware of that.  
2     That's not something that I--

3           Q     Yeah.

4           A     --particularly studied.

5           Q     Okay. On the WWW6B, you list or I'm on a U  
6     list, if you had anything with putting this together, but  
7     the formation and total partial depth is listed as the  
8     Trenton?

9           A     Well, the Trenton is the bottom of the well.  
10    We're going to land in the Utica/Point Pleasant.

11           MS. RAUPP: Could I get Exhibit 5 for him to  
12    look at?

13           BY COMMISSIONER MARTIN:

14           Q     Sure.

15           A     Since I had nothing to do with preparing the  
16    permit, I'm going to step out on a limb here a little bit.  
17    As you know, you will allow us to drill deeper by permit  
18    than what we actually drill the well.

19                    So I'm going to assume that the company  
20    picked the Trenton so that we could drill through all of  
21    the Utica/Point Pleasant should that be how we design our  
22    horizontal. And that way, if we were to touch the  
23    Trenton, it would have been covered by the permit.

24                    I was not involved in that particular

1 decision process, but that would be my assumption, looking  
2 at this piece of paper, sir.

3 Q So how much footage would there be-- Can you  
4 tell me the stratigraphy here? Help me with the  
5 stratigraphy between the Utica/Point Pleasant/Trenton in  
6 terms of where they are relative to each other?

7 A You have the Cincinnati group on top. Then you  
8 run into the Utica. The Cincinnati group is sometimes  
9 referred to as the Reedsville for common-ology. But it's  
10 in the Cincinnati group.

11 Then you run into the Utica. And then  
12 below that, if we're lucky, you have the Point Pleasant.  
13 And the Point Pleasant is where the best reserves are.

14 Then you have a little, tiny limestone  
15 that's called the Lexington. That's about 50 feet TDD,  
16 and then you run into your Trenton Black River that lays  
17 below that.

18 Q And the Utica will be approximately how thick?

19 A We're hoping to have about 170 feet of Utica and  
20 about 170 feet of Point Pleasant. It's a transitional  
21 zone, as you're aware of, sir. And so probably all  
22 together we might have 300 feet, and that 170 will jockey  
23 back and forth depending on depositional environment.

24 Q And then you have the Lexington between Point

1 Pleasant and Trenton.

2 A Yes, sir.

3 Q Correct?

4 A Yes, sir.

5 Q You said about 50 feet?

6 A Yes, sir.

7 Q How deep into the Trenton is this proposed to  
8 go?

9 A We don't want to go into the Trenton. Again,  
10 and I'm speaking without knowledge for how the permit was  
11 prepared. But as I've always been taught in my thirty  
12 years of experience, it's better to permit deep. And if  
13 you drill short of that, everybody at the State's happy.  
14 If you permit shallow and drill deep, then you end up  
15 sitting there and having to explain things.

16 Q So as far as you know, the intent is not to go  
17 into the Trenton?

18 A No, sir. Our goal-- Now, we will drill a pilot  
19 hole to log it and get our landing points.

20 Q And where will that TD?

21 A Well, according to this, our TVD is 10,730 feet.

22 Q And what formation is that?

23 A That should put us into the Trenton so that we  
24 can get logging tools and everything into the hole.

1           Q     Right. That's what I'm getting at. So the TD  
2 will be in Trenton?

3           A     Yes, sir.

4           Q     In the vertical.

5           A     Yes, sir, for purposes of doing a science  
6 project and get--

7           Q     How deep into the Trenton will that vertical  
8 section go?

9           A     I'm going to estimate 50 feet. Again, we  
10 permitted it so that we could do it in a one-log run.

11          Q     And there's no plans to do any completion work  
12 in the Trenton?

13          A     No, sir. Our goal is to plug back and complete  
14 the well completely in the Point Pleasant.

15          Q     Is there Trenton potential in this area?

16          A     I am unaware of any Trenton wells any closer  
17 than Ohio or Jackson County. That doesn't mean it's not  
18 there. But as a close-ologist geologist, I'm not aware of  
19 anything that has indicated potential.

20          Q     And again I apologize to ask this again, but I  
21 got confused originally, also. And Barry, the Chairman, I  
22 think got it cleared up. But just so I'm clear, the 179  
23 feet, what's the additional reserves attributable to that?

24          A     No. Actually, Barry got it right. I was the

1       one that had it wrong. We anticipate that we could get  
2       about 300,000 more a day in production and 300 million  
3       more a day in EUR reserves.

4               CHAIRMAN LAY: Clarify again.

5               THE WITNESS: Okay.

6               CHAIRMAN LAY: Not 300 million a day. Three  
7       hundred--

8               THE WITNESS: Yeah. It's 300,000 in production  
9       daily from that, MCFD, and three hundred million in EUR's.  
10       I'm glad you caught that. I'd a looked kinda dumb on the  
11       record with that one out there.

12              COMMISSIONER MARTIN: Okay. Thank you.

13              CHAIRMAN LAY: Other questions? I just wanted  
14       to clarify. I thought you'd found a fantastic field.

15              THE WITNESS: Thank you.

16              MS. RAUPP: If I could, Chairman, I'd like to  
17       mark this as the next exhibit, the drawing.

18              COMMISSIONER MARTIN: Any objections?

19                       (WHEREUPON, said document was  
20       identified as Exhibit No. 10 and  
21       is attached hereto and made a part  
22       hereof.)

23              CHAIRMAN LAY: No other questions for the  
24       witness? The witness may be excused.



1 (Witness excused.)

2 CHAIRMAN LAY: Call your next witness.

3 MS. RAUPP: I have nothing further, Chairman.

4 CHAIRMAN LAY: Anything for the record before we  
5 go off the record? Okay. Let's go off the record.

6 (WHEREUPON, a brief recess was had.)

7 CHAIRMAN LAY: We're back on the record. Do I  
8 have a motion?

9 COMMISSIONER RADABAUGH: I have a motion,  
10 Mr. Chairman. I make a motion to grant Jay-Bee Oil & Gas,  
11 Inc., an exception to Rule 39CSR1.4.2 for the Larry 3U  
12 well, 4709502334, to extend the lateral by 179 feet beyond  
13 the approved length of the last hearing, therefore, having  
14 an approximate distance of 1957 feet between the Larry 3U  
15 and Antero's Rymer 4H well.

16 COMMISSIONER GUM: And I'd like to second that  
17 motion.

18 CHAIRMAN LAY: We have a motion and a proper  
19 second. Any further discussion? All those in favor of  
20 the motion, aye? Opposed, nay? Motion carries.

21 (WHEREUPON, the motion passed.)

22 CHAIRMAN LAY: Would you be so kind as to  
23 prepare a draft order for us?

24 MS. RAUPP: I certainly will. Thank you,

1 Chairman.

2 CHAIRMAN LAY: Would you submit it, not only to  
3 the Commission, but to Mr. Foster as well?

4 MS. RAUPP: I will. And I also agreed to let  
5 Mr. Christianson review it before I submit it to you, if  
6 that's acceptable.

7 CHAIRMAN LAY: That's fine. Anything further  
8 for the record? Okay. We'll go off the record then.

9 (WHEREUPON, the hearing was adjourned.)

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## REPORTER'S CERTIFICATE

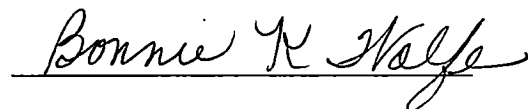
STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, to wit:

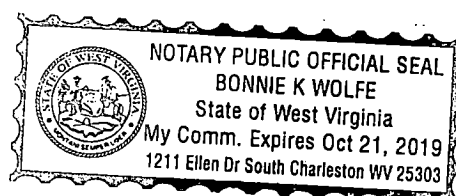
I, BONNIE K. WOLFE, Certified Court Reporter and Notary Public of West Virginia, do hereby certify that the foregoing is, to the best of my skill and ability, a true and accurate transcript of all the proceedings as set forth in the caption hereof.

Given under my hand this 1st day of August, 2016.

My commission expires October 21, 2019.



Certified Court Reporter





west virginia department of environmental protection

Oil and Gas Conservation Commission  
601 57<sup>th</sup> Street, SE Charleston, WV 25304  
(304)926-0499, Ext 1656

Earl Ray Tomblin, Governor  
Barry K. Lay, Chairman  
www.wvdep.org

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA**

IN THE MATTER OF THE REQUEST BY JAY-BEE OIL  
& GAS, INC. FOR AN EXCEPTION TO RULE 39CSR1.4.2  
FOR THE DRILLING OF THE WELL IDENTIFIED AS THE  
LARRY 3U, API: 47-095-02334. JAY-BEE IS PROPOSING TO  
EXTEND THE LATERAL ON A PREVIOUSLY APPROVED  
LOCATION. THE LARRY 3U WELL IS TO BE LOCATED IN  
ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA.

**DOCKET NO. 241  
CAUSE NO. 230**

**NOTICE OF HEARING**

Jay-Bee Oil & Gas, Inc. ("Jay-Bee") has requested the WV Oil and Gas Conservation Commission (OGCC) review and approve an exception to Rule 39 CSR 1.4.2 for the well identified as the Larry 3U. Under previous Order (Order No. 1) the OGCC approved the Larry 3U to be drilled within 3,000' of Jay-Bee's Moe 3U well, API: 47-095-0232 and an Antero well identified as the Rymer 4HD API: 47-095-02273. Jay-Bee has now come back before the OGCC requesting an increase in lateral length. Jay-Bee will provide evidence and testimony at the hearing which is scheduled for:

DATE: July 27, 2016

TIME: 1:00 pm

PLACE: DEP - Oil and Gas Conservation Commission  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

IN THE NAME OF THE STATE OF WEST VIRGINIA

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA

By: Barry K. Lay  
Barry K. Lay, Chairman

Dated this 8<sup>th</sup> day of July, 2016, at Charleston, West Virginia.

Docket #

241-230

Certified Mail

Jay-Bee Oil & Gas Inc.  
1720 Route 22 E  
Union, NJ 07083

Ashlie Steele  
Carter Hardesty  
Antero Resources Corporation  
1615 Wynkoop Street  
Denver, CO 80202

91 7199 9991 7035 6694 1816

91 7199 9991 7035 6694 1809

**Raines, Cindy J**

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**From:** adlaw@wvsos.com  
**Sent:** Monday, July 11, 2016 2:09 PM  
**To:** Raines, Cindy J  
**Subject:** Meeting Notice Approval



**Secretary of State**  
Bldg. 1, Suite 157-K  
1900 Kanawha Blvd. East  
Charleston, WV 25305-0770

**Natalie E. Tennant**  
Secretary Of State  
State Of West Virginia

**Phone:** 304-558-6000  
866-767-8683  
**Visit us online:**  
[www.wvsos.com](http://www.wvsos.com)

Your meeting notice has been approved.

You may view it online here.

If you have any questions, please contact our office during normal business hours for assistance.

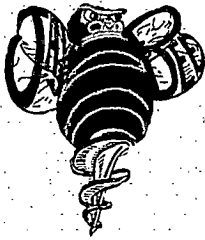
**Raines, Cindy J**

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**From:** Raines, Cindy J  
**Sent:** Tuesday, July 12, 2016 8:12 AM  
**To:** 'nmorris@tylerstarnews.com'  
**Subject:** Legal ad  
**Attachments:** Jay-Bee 241-230.pdf

Please print the attached as a legal ad in the Tyler Star News on Wednesday, July 13 and 20, 2016. And send invoice to: WV Oil and Gas Conservation Commission 601 57<sup>th</sup> Street, SE Charleston, WV

Thank you,  
Cindy Raines



**JAY-BEE OIL & GAS, INC.**

June 14, 2016

Deep Well Permitting Office  
ATTN Cindy Raines  
Office of Oil and Gas  
West Virginia Dept. of Environmental Protection  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

RE: Larry 3U Wellbore Location Extension Exception Letter

Ms. Raines:

Jay-Bee Oil & Gas, Inc. is seeking authorization to extend drilling within 3000' of an existing deep well producing lateral.

We would like to extend drilling our lateral to 410' off of our unit boundary, within the 3000' buffer surrounding the Rymer 4HD (API 47-095-02273) wellbore. Extending the lateral would allow us to capture additional potential natural gas production from our unit. For this reason, we formally request an exception hearing. Due to time constraints and contractual commitments with a horizontal rig, we would like to request an immediate hearing.

An exception has already been made, and granted, regarding the Moe 3U (API 47-095-02321), which is shown on the included plat, on June 13<sup>th</sup>, 2016. It will not be modified with the additional length request, as there will be no changes to distances.

If you would have any questions concerning this matter, please feel free to contact our office at the numbers listed below.

Sincerely,

Shane Dowell  
Office Manager

Received  
Office of Oil & Gas

JUN 16 2016



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Jay-Bee Oil & Gas 24610 Tyler Ellsworth Middlebourne 7.5'  
Operator ID County District Quadrangle
- 2) Operator's Well Number: Larry 3U Well Pad Name: Larry Pad
- 3) Farm Name/Surface Owner: Jay Bee Production Company Public Road Access: Klondike Rd
- 4) Elevation, current ground: 740.23 Elevation, proposed post-construction: 739.4
- 5) Well Type (a) Gas ☒ Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow \_\_\_\_\_ Deep ☒  
Horizontal ☒
- 6) Existing Pad: Yes or No No
- 7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Utica: 10,615' Depth, 256' Thickness, 8000 psi, Trenton: 10,730' Depth Thickness, 180' Thickness, 8000 psi
- 8) Proposed Total Vertical Depth: 10,730' TVD, 10,615 TVD (Horizontal section)
- 9) Formation at Total Vertical Depth: Trenton (TVD), Utica(Horizontal)
- 10) Proposed Total Measured Depth: 18,426'
- 11) Proposed Horizontal Leg Length: 7,311'
- 12) Approximate Fresh Water Strata Depths: 74.6
- 13) Method to Determine Fresh Water Depths: Well Record 47-095-01127 & 47-095-00864
- 14) Approximate Saltwater Depths: N/A
- 15) Approximate Coal Seam Depths: N/A
- 16) Approximate Depth to Possible Void (coal mine, karst, other): N/A
- 17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No ☒
- (a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

18)

**CASING AND TUBING PROGRAM**

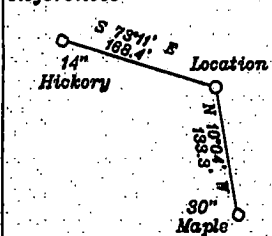
TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	26	New	A500	85 lb./ft	30'	30'	CTS 49 Cu. Ft.
Fresh Water	20	New	J-55	94 lb./ft	300'	300'	CTS 297 Cu. Ft.
Coal	13 3/8	New	J-55	61 lb./ft	2,500'	2,500'	CTS 1830 Cu. Ft.
Intermediate	9 5/8	New	HCP-110	47 lb./ft	9,500'	9,500'	2537 Cu. Ft.
Production	5 1/2	New	P-110	23 lb./ft	18,426'	18,426'	3951 Cu. Ft.
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26	30	.375	N/A	50	Class A	1.18-1.20
Fresh Water	20	24	.438	2,110	1,000	Class A	1.18-1.20
Coal	13 3/8	17 1/2	.480	3,090	1,500	Class A	1.18-1.24
Intermediate	9 5/8	12 1/4	.435	9,440	2,000	Class A	1.18-3.00
Production	5 1/2	8 1/2	.415	16,800	2,500	Class A	1.36-2.08
Tubing							
Liners							

**PACKERS**

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

## References



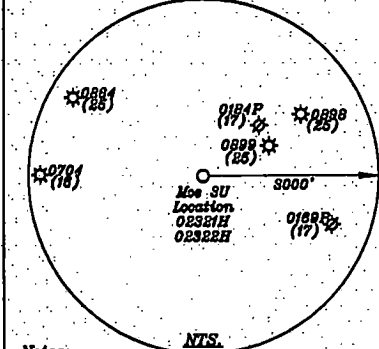
**Top Hole**  
Geo NAD 83- 39.468073 N, 80.887458 W  
UTM NAD 83(Meters)-4368727.33 N, 509880.64 E  
UTM NAD 83(Feet)-14333066.24 N, 1672177.23 E

**Landing Point**  
Geo NAD 83- 39.468989 N, 80.890314 W  
UTM NAD 83(Meters)-4368606.71 N, 509435.13 E  
UTM NAD 83(Feet)-14392370.50 N, 1671371.76 E

**Bottom Hole**  
Geo NAD 83- 39.447573 N, 80.881708 W  
UTM NAD 83(Meters)-4368452.78 N, 510178.43 E  
UTM NAD 83(Feet)-14325603.83 N, 1673810.41 E

A-Sulser TM. 20-110 4.412 Ac.  
B-Kelly et al TM. 28-46.18 4.323 Ac.  
C-Kelly et al TM. 28-46.17 4.114 Ac.  
D-Johnson TM. 28-46.23 3.588 Ac.  
E-Johnson TM. 28-46.22 2.92 Ac.  
F-Holliday TM. 28-46.13 5.94 Ac.  
G-Holliday TM. 28-46.12 3.238 Ac.  
H-Kanz TM. 28-46.3 5.4 Ac.  
I-Patera TM. 28-46.7 7.32 Ac.  
J-Peak TM. 28-46.8 2.079 Ac. DOAN  
K-Peak TM. 28-46.20 0.652 Ac. DOAN  
L-Peak TM. 28-46.19 4.59 Ac. DOAN  
M-WVDNR TM. 27-3 0.44 Ac.  
N-Shrader TM. 28-46.1 5.58 Ac.  
O-Peak TM. 28-46.21 0.22 Ac.  
P-JayBee TM. 28-46.14 8.692 Ac.  
Q-Pittman TM. 28-46.2 5.135 Ac.  
R-Johnson TM. 28-46.9 5 Ac.  
S-Patera TM. 28-46.8 1.702 Ac.  
T-Patera TM. 28-46.15 3.722 Ac.  
U-JayBee TM. 28-46.16 5.094 Ac.  
V-Ison TM. 28-46.10 4.98 Ac.  
W-Doty TM. 28-46.5 13.14 Ac.  
X-Kanz TM. 28-46.4 8.1 Ac.  
Y-Walton TM. 28-46.11 6.43 Ac.  
Z-JayBee TM. 28-46.24 3.059 Ac.  
AA-Palmer TM. 28-19.11 9.40 Ac.  
BB-Westbrook TM. 28-19.4 9.36 Ac.  
CC-Reed TM. 28-41 1 Ac.  
DD-Reed TM. 28-40 2.75 Ac.  
EE-Reed et al TM. 28-39 8.17 Ac.  
FF-JayBee Oil & Gas, Inc. TM. 28-19.9 1.498 Ac.  
GG-WVDNR TM. 29-7 7.5 Ac.

The distance between Larry SU Top Hole and Moe SU Top Hole is 3,222'. The distance of the Moe SU Top Hole to Larry SU leg is 2,087'.



## Notes:

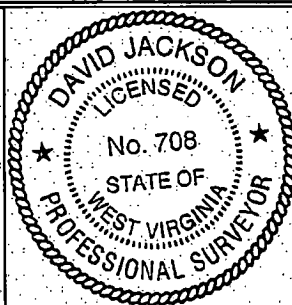
1. All wells within 600' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
2. Well bore path and surface hole location are over 400' from the unit boundary.
3. Ties to wells and corners are based on State Plane Crd North-WV North Zone NAD 83.
4. No water wells were found within 250' of the well location. No dwellings or buildings were found within 625' from the center of the proposed pad. No perennial stream is located within 100' of LOD. No producing trout stream located within 300' of LOD.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

FILE NO. \_\_\_\_\_  
DRAWING NO. 1  
SCALE 1" = 2000'  
MINIMUM DEGREE OF  
ACCURACY 1 in 200  
PROVEN SOURCE OF  
ELEVATION GPS  
submeter unit

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) David L Jackson  
R.P.E. \_\_\_\_\_ P.S. 708



STATE OF WEST VIRGINIA  
Division of Environmental Protection  
OFFICE OF OIL AND GAS

DATE June 28, 2016  
OPERATOR'S WELL NO. Moe 3U  
API WELL NO. \_\_\_\_\_

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL STATE COUNTY PERMIT  
(IF 'GAS') PRODUCTION X STORAGE DEEP X SHALLOW  
LOCATION: ELEVATION 961.9' WATER SHED Middle Island Creek  
DISTRICT Ellsworth COUNTY Tyler  
QUADRANGLE Middlebourne 7 1/2'  
SURFACE OWNER Jay Bee Production Company ACREAGE 286.03 ac.  
OIL & GAS ROYALTY OWNER Ridgetop Capital LP and Ridgetop Capital II, LP LEASE ACREAGE 286.03 ac.  
LEASE NO. RT2

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR  
STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW  
FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON CLEAN OUT AND REPLUG  
TARGET FORMATION Utica ESTIMATED DEPTH TVD = 10,840' TMD = 18,843'  
WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda  
ADDRESS 1720 Route 22 E, Union, NJ 07083 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337

LONGITUDE 80-52-30 N Bottom Hole 3,919' Top Hole 11,630'



west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> Street, SE Charleston, WV 25304  
(304)926-0499, Ext 1656

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
dep.wv.gov

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA**

**IN THE MATTER OF THE REQUEST BY JAY-BEE  
OIL AND GAS, INC. FOR AN EXCEPTION TO RULE  
39 CSR 1.4.2 FOR THE DRILLING OF THE WELL  
IDENTIFIED AS API: 47-095-02334, LARRY 3U  
TO BE LOCATED IN ELLSWORTH DISTRICT,  
TYLER COUNTY, WEST VIRGINIA.**

**DOCKET NO. 240-230  
CAUSE NO. 1**

**REPORT OF THE COMMISSION AND ORDER**

This cause came before the Commission on June 13, 2016, at the Department of Environmental Protection, Charleston, West Virginia, after giving notice as required by law, at the request of Jay-Bee Oil & Gas, Inc. ("Jay-Bee"), seeking approval for an exception to W.Va. C.S.R. § 39-1-4.2 for the drilling of a proposed deep well, identified as Larry 3U (API #47-095-02334 ) (referred to hereinafter as the "Larry 3U"). Jay-Bee proposes to drill the Larry 3U well with certain locations along the horizontal leg within 3,000 feet of Jay-Bee's well identified as Moe 3U, API # 47-095-02321, permitted May 12, 2016 (referred to hereinafter as the "Moe 3U"), and within 3,000 feet of Antero Resources, Inc.'s Rymer 4HD well, API # 47-095-02273 (referred to hereinafter as "Rymer 4HD") and has requested approval from the Commission for a variance pursuant to W.Va. C.S.R. § 39-1-4.2.

There being a quorum of the Commission present, a hearing was commenced. Present for Jay-Bee were Valerie H. Raupp, Esq., appearing as counsel, Shane Dowell and Randy Broda of Jay-Bee, David Jackson, of Jackson Surveying, Inc. and Donald Kesterson, consultant and petroleum geologist. Present for Antero Resources Corporation was representative Carter Hardesty.

The Commission heard testimony from three witnesses, Shane Dowell, David Jackson, P.S., and Donald Kesterson. Their testimony and response to questions by members of the Commission included the reasoning for spacing the Larry 3U well horizontal well bore location

**Promoting a healthy environment.**

within 3,000 feet of two points of another permitted deep well the Moe 3U and the location of the bottom hole of the Larry 3U within 3,000 feet of the bottom hole of the Rymer 4HD; characteristics of the Utica/ Point Pleasant formation in which the Larry 3U well will be drilled; discussion of existing data from other Utica/Point Pleasant wells; issues related to potential drainage and expected pressures. The Commission determined that limited testimony regarding the compliance of the permit application with relevant requirements was required in this instance as the permit has been approved and issued for a shorter length on April 20, 2016 and that permit was entered into evidence. Documents submitted as exhibits, included specifically, the notice of hearing and continuance related to the exception request, excerpts from Jay-Bee's April 20, 2016 issued permit for the Larry 3U and the entirety of the permit, which the Commission found conclusively established that Jay-Bee submitted all the necessary statutory information for a deep well permit application, including proof that all requisite notices were provided, and revised plats for the Larry 3U correcting a distance to unit boundary and showing the proposed extension and relevant distances to the Moe 3U and the Rymer 4HD and maps demonstrating a 3,000 foot offset area for the Larry 3U and a two-mile offset map for the Larry 3U.

Following the witness testimony, the Commission adjourned for an executive session. Following an executive session, a member of the Commission made a motion to grant Jay-Bee's request to allow the drilling of the Larry 3U well within 3,000 feet of the Moe 3U API # 47-95-02321 and Rymer 4HD, API# 47-095-02273 as described in the submitted exhibits. The motion was properly seconded and a vote was taken without objection. The motion passed and Jay-Bee's request was granted.

Thereupon, the Commission makes the following Findings of Fact and Conclusions of Law:

#### **FINDINGS OF FACT**

1. Members of the Commission present at the hearing were Barry Lay, Chair, Robert Radabaugh, Anthony Gum, and ex officio member Lisa McClung as proxy for Randy Huffman. Cindy Raines was also present.

2. Jay-Bee is an operator within the meaning of paragraph (4) subsection (a) of West Virginia Code § 22C-9-2.

3. Jay-Bee proposes to drill the Larry 3U well into the Utica/Point Pleasant formation, making the well a deep well as defined by West Virginia Code § 22C-9-2.

4. The Larry 3U well was permitted on April 20, 2016, with a plat revised and dated April 27, 2016 reflecting a horizontal leg length of 6,258 feet. The permit issued demonstrates

that all the necessary statutory information for a deep well permit application, including proof that all requisite notices were provided, has been appropriately submitted for the Larry 3U permit application.

5. Jay-Bee immediately sought an exception hearing pursuant to W.Va. C.S.R § 39-1-4.3.

6. A hearing on the exception request was appropriately noticed. The Meeting Notice available on the West Virginia Secretary of State's website for the public states "Purpose: Hearing - IN THE MATTER OF THE REQUEST BY JAY-BEE OIL AND GAS, INC. FOR AN EXCEPTION TO RULE 39 CSR 1.4.2 FOR THE DRILLING OF THE WELL IDENTIFIED AS API: 47-095-02334, LARRY 3U, TO BE LOCATED IN ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA." No existing or permitted well was named, just the request for exception to the rule of 3,000 foot spacing between deep well locations. The Larry 3 U is the only well identified. This notice was entered into evidence by the Commission.

7. No specific existing or permitted well from which the exception was sought was named by API number or well name in the publication notice and the Notice of Hearing sent to well operators. These notices stated that Jay-Bee sought to drill the bottom hole within 3,000 feet of an existing permitted well location. The Larry 3U well was the only well specified by name or API number in the notice. Further the case style reflects only a request for an exception to the regulation by the Larry 3U. All notices were entered into evidence by the Commission.

8. The Moe 3U permit was issued subsequent to the original request for exception. Jay-Bee requested that the relevant distances from the Moe 3U be considered within its request for a spacing variance and exception.

9. Antero Resources Corporation is the operator of the Rymer 4HD and was present at the hearing through their representative Carter Hardesty.

10. Jay-Bee is the operator of the Moe 3U and was present at the hearing and received the Notice of Hearing and the continuance of hearing notice as the operator of the Larry 3U and was present at the hearing.

11. No other operator or well was affected by the request for exception and the Meeting Notice on the West Virginia Secretary of State website did not reference the well or wells from which a spacing exception was sought.

12. The top hole location of the Larry 3U well is not within 3,000 feet of any other permitted oil or gas well.

13. The horizontal leg of the Larry 3U is within 3,000 feet of the top hole of the Moe 3U well, as permitted on May 12, 2016, specifically approximately 2,087 feet.

14. The horizontal leg of the Larry 3U is within 3,000 feet of the landing point of the Moe 3U, as permitted on May 12, 2016, specifically approximately 2,980 feet.

15. The bottom hole of the Larry 3U is within 3,000 feet of the bottom hole of the Rymer 4HD, as permitted, specifically approximately 2,136 feet.

16. The distance from the unit boundary to the bottom hole of the Larry 3U was corrected to 582 feet on the revised plat submitted into evidence to correct a drafting error. In all instances, however, the Larry 3U well is more than 400 feet from the unit boundary. Further, the coordinates for all relevant distances were correct on the plat submitted with the application and the revised plat.

17. It is the position of the Commission that the location of the Larry 3U requires a variance to W.Va. C.S.R. § 39-1-4.2 with regard to the Moe 3U and the Rymer 4HD.

18. The formation from which the Larry 3U seeks to produce is a shale formation that requires stimulation to produce. The stimulation in this case is through fracturing the shale and horizontal drilling as described in the Larry 3U permit.

19. Undisputed testimony from petroleum engineer Donald Kesterson established that given the characteristics of the formation and the drilling process required for production, the proposed location of the Larry 3U would not drain, interfere with, decrease or otherwise effect production from the Moe 3U well and the Rymer 4HD well.

20. There were no objections to the spacing variance request.

21. A motion to grant Jay-Bee's spacing variance request with regard to the Rymer 4HD and the Moe 3U was made and seconded.

22. The motion passed.

#### **CONCLUSIONS OF LAW**

1. That W.Va. C.S.R. § 39-1-4.2 requires that all deep wells drilled shall be not less than 3,000 feet from a permitted deep well location and that W.Va. C.S.R. § 39-1-4.3 allows for an exception to that requirement upon notice and hearing.

2. That due notice of time, place and purpose of the hearing has been given as required by law.

3. That pursuant to Chapter 22C, Article 9, of the West Virginia Code, as amended, the Commission has jurisdiction over the subject matter embraced in said notice, and the persons

interested therein, and jurisdiction to promulgate the hereinafter prescribed Order, and that a quorum of the Commission was present at the hearing.

4. The requested spacing exception is required with regard to the Moe 3U and the Rymer 4HD.

5. The requested location of the Larry 3U well within 3,000 feet of the Moe 3U and the Rymer 4HD is necessary to promote the efficient development of oil and gas resources, prohibit waste, and encourage the maximum recovery of oil and gas resources. See W.Va. Code § 22C-9-1 and should be granted.

### **ORDER**

Upon presentation of evidence at a hearing before the West Virginia Oil and Gas Conservation Commission on June 13, 2016, and based upon the Findings of Fact and Conclusions of Law contained herein, the Commission hereby grants a variance from the requirements in W.Va. C.S.R. § 39-1-4.2 that states in relevant part, "each deep well drilled shall not be less than 3,000 feet from a permitted deep well location . . . " The spacing variance granted hereby permits Jay-Bee to drill the Larry 3U well within 3,000 feet of the Moe 3U, API # 47-047-02321 and the Rymer 4HD, API# 47-095-02273 as depicted on the maps admitted into evidence during the hearing.

**IN THE NAME OF THE STATE OF WEST VIRGINIA**

### **OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA**

By: Barry K. Lay  
Barry K. Lay, Chairman

Dated this 20th day of June, 2016, at Charleston, West Virginia.





west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> Street, SE Charleston, WV 25304  
(304)926-0499, Ext 1656

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
dep.wv.gov

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF WEST VIRGINIA**

**IN THE MATTER OF THE REQUEST BY JAY-BEE  
OIL AND GAS, INC. FOR AN EXCEPTION TO RULE  
39 CSR 1.4.2 FOR THE DRILLING OF THE WELL  
IDENTIFIED AS API: 47-095-02334, LARRY 3U  
TO BE LOCATED IN ELLSWORTH DISTRICT,  
TYLER COUNTY, WEST VIRGINIA.**

**DOCKET NO. 240-230  
CAUSE NO. 1**

**REPORT OF THE COMMISSION AND ORDER**

This cause came before the Commission on June 13, 2016, at the Department of Environmental Protection, Charleston, West Virginia, after giving notice as required by law, at the request of Jay-Bee Oil & Gas, Inc. ("Jay-Bee"), seeking approval for an exception to W.Va. C.S.R. § 39-1-4.2 for the drilling of a proposed deep well, identified as Larry 3U (API #47-095-02334 ) (referred to hereinafter as the "Larry 3U"). Jay-Bee proposes to drill the Larry 3U well with certain locations along the horizontal leg within 3,000 feet of Jay-Bee's well identified as Moe 3U, API # 47-095-02321, permitted May 12, 2016 (referred to hereinafter as the "Moe 3U"), and within 3,000 feet of Antero Resources, Inc.'s Rymer 4HD well, API # 47-095-02273 (referred to hereinafter as "Rymer 4HD") and has requested approval from the Commission for a variance pursuant to W.Va. C.S.R. § 39-1-4.2.

There being a quorum of the Commission present, a hearing was commenced. Present for Jay-Bee were Valerie H. Raupp, Esq., appearing as counsel, Shane Dowell and Randy Broda of Jay-Bee, David Jackson, of Jackson Surveying, Inc. and Donald Kesterson, consultant and petroleum geologist. Present for Antero Resources Corporation was representative Carter Hardesty.

The Commission heard testimony from three witnesses, Shane Dowell, David Jackson, P.S., and Donald Kesterson. Their testimony and response to questions by members of the Commission included the reasoning for spacing the Larry 3U well horizontal well bore location

Promoting a healthy environment.

within 3,000 feet of two points of another permitted deep well the Moe 3U and the location of the bottom hole of the Larry 3U within 3,000 feet of the bottom hole of the Rymer 4HD; characteristics of the Utica/ Point Pleasant formation in which the Larry 3U well will be drilled; discussion of existing data from other Utica/Point Pleasant wells; issues related to potential drainage and expected pressures. The Commission determined that limited testimony regarding the compliance of the permit application with relevant requirements was required in this instance as the permit has been approved and issued for a shorter length on April 20, 2016 and that permit was entered into evidence. Documents submitted as exhibits, included specifically, the notice of hearing and continuance related to the exception request, excerpts from Jay-Bee's April 20, 2016 issued permit for the Larry 3U and the entirety of the permit, which the Commission found conclusively established that Jay-Bee submitted all the necessary statutory information for a deep well permit application, including proof that all requisite notices were provided, and revised plats for the Larry 3U correcting a distance to unit boundary and showing the proposed extension and relevant distances to the Moe 3U and the Rymer 4HD and maps demonstrating a 3,000 foot offset area for the Larry 3U and a two-mile offset map for the Larry 3U.

Following the witness testimony, the Commission adjourned for an executive session. Following an executive session, a member of the Commission made a motion to grant Jay-Bee's request to allow the drilling of the Larry 3U well within 3,000 feet of the Moe 3U API # 47-95-02321 and Rymer 4HD, API# 47-095-02273 as described in the submitted exhibits. The motion was properly seconded and a vote was taken without objection. The motion passed and Jay-Bee's request was granted.

Thereupon, the Commission makes the following Findings of Fact and Conclusions of Law:

#### **FINDINGS OF FACT**

1. Members of the Commission present at the hearing were Barry Lay, Chair, Robert Radabaugh, Anthony Gum, and ex officio member Lisa McClung as proxy for Randy Huffman. Cindy Raines was also present.
2. Jay-Bee is an operator within the meaning of paragraph (4) subsection (a) of West Virginia Code § 22C-9-2.
3. Jay-Bee proposes to drill the Larry 3U well into the Utica/Point Pleasant formation, making the well a deep well as defined by West Virginia Code § 22C-9-2.
4. The Larry 3U well was permitted on April 20, 2016, with a plat revised and dated April 27, 2016 reflecting a horizontal leg length of 6,258 feet. The permit issued demonstrates

that all the necessary statutory information for a deep well permit application, including proof that all requisite notices were provided, has been appropriately submitted for the Larry 3U permit application.

5. Jay-Bee immediately sought an exception hearing pursuant to W.Va. C.S.R § 39-1-4.3.

6. A hearing on the exception request was appropriately noticed. The Meeting Notice available on the West Virginia Secretary of State's website for the public states "Purpose: Hearing - IN THE MATTER OF THE REQUEST BY JAY-BEE OIL AND GAS, INC. FOR AN EXCEPTION TO RULE 39 CSR 1.4.2 FOR THE DRILLING OF THE WELL IDENTIFIED AS API: 47-095-02334, LARRY 3U, TO BE LOCATED IN ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA." No existing or permitted well was named, just the request for exception to the rule of 3,000 foot spacing between deep well locations. The Larry 3 U is the only well identified. This notice was entered into evidence by the Commission.

7. No specific existing or permitted well from which the exception was sought was named by API number or well name in the publication notice and the Notice of Hearing sent to well operators. These notices stated that Jay-Bee sought to drill the bottom hole within 3,000 feet of an existing permitted well location. The Larry 3U well was the only well specified by name or API number in the notice. Further the case style reflects only a request for an exception to the regulation by the Larry 3U. All notices were entered into evidence by the Commission.

8. The Moe 3U permit was issued subsequent to the original request for exception. Jay-Bee requested that the relevant distances from the Moe 3U be considered within its request for a spacing variance and exception.

9. Antero Resources Corporation is the operator of the Rymer 4HD and was present at the hearing through their representative Carter Hardesty.

10. Jay-Bee is the operator of the Moe 3U and was present at the hearing and received the Notice of Hearing and the continuance of hearing notice as the operator of the Larry 3U and was present at the hearing.

11. No other operator or well was affected by the request for exception and the Meeting Notice on the West Virginia Secretary of State website did not reference the well or wells from which a spacing exception was sought.

12. The top hole location of the Larry 3U well is not within 3,000 feet of any other permitted oil or gas well.

13. The horizontal leg of the Larry 3U is within 3,000 feet of the top hole of the Moe 3U well, as permitted on May 12, 2016, specifically approximately 2,087 feet.

14. The horizontal leg of the Larry 3U is within 3,000 feet of the landing point of the Moe 3U, as permitted on May 12, 2016, specifically approximately 2,980 feet.

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16. The distance from the unit boundary to the bottom hole of the Larry 3U was corrected to 582 feet on the revised plat submitted into evidence to correct a drafting error. In all instances, however, the Larry 3U well is more than 400 feet from the unit boundary. Further, the coordinates for all relevant distances were correct on the plat submitted with the application and the revised plat.

17. It is the position of the Commission that the location of the Larry 3U requires a variance to W.Va. C.S.R. § 39-1-4.2 with regard to the Moe 3U and the Rymer 4HD.

18. The formation from which the Larry 3U seeks to produce is a shale formation that requires stimulation to produce. The stimulation in this case is through fracturing the shale and horizontal drilling as described in the Larry 3U permit.

19. Undisputed testimony from petroleum engineer Donald Kesterson established that given the characteristics of the formation and the drilling process required for production, the proposed location of the Larry 3U would not drain, interfere with, decrease or otherwise effect production from the Moe 3U well and the Rymer 4HD well.

20. There were no objections to the spacing variance request.

21. A motion to grant Jay-Bee's spacing variance request with regard to the Rymer 4HD and the Moe 3U was made and seconded.

22. The motion passed.

#### **CONCLUSIONS OF LAW**

1. That W.Va. C.S.R. § 39-1-4.2 requires that all deep wells drilled shall be not less than 3,000 feet from a permitted deep well location and that W.Va. C.S.R. § 39-1-4.3 allows for an exception to that requirement upon notice and hearing.

2. That due notice of time, place and purpose of the hearing has been given as required by law.

3. That pursuant to Chapter 22C, Article 9, of the West Virginia Code, as amended, the Commission has jurisdiction over the subject matter embraced in said notice, and the persons

interested therein, and jurisdiction to promulgate the hereinafter prescribed Order, and that a quorum of the Commission was present at the hearing.

4. The requested spacing exception is required with regard to the Moe 3U and the Rymer 4HD.

5. The requested location of the Larry 3U well within 3,000 feet of the Moe 3U and the Rymer 4HD is necessary to promote the efficient development of oil and gas resources, prohibit waste, and encourage the maximum recovery of oil and gas resources. See W.Va. Code § 22C-9-1 and should be granted.

### **ORDER**

Upon presentation of evidence at a hearing before the West Virginia Oil and Gas Conservation Commission on June 13, 2016, and based upon the Findings of Fact and Conclusions of Law contained herein, the Commission hereby grants a variance from the requirements in W.Va. C.S.R. § 39-1-4.2 that states in relevant part, "each deep well drilled shall not be less than 3,000 feet from a permitted deep well location . . . " The spacing variance granted hereby permits Jay-Bee to drill the Larry 3U well within 3,000 feet of the Moe 3U, API # 47-047-02321 and the Rymer 4HD, API# 47-095-02273 as depicted on the maps admitted into evidence during the hearing.

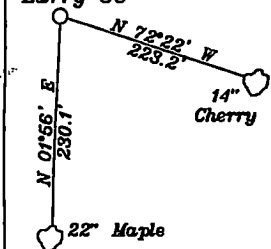
**IN THE NAME OF THE STATE OF WEST VIRGINIA**

### **OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA**

By: \_\_\_\_\_

Barry K. Lay, Chairman

Dated this 20th day of June, 2016, at Charleston, West Virginia.

References:  
Larry 3U

A-Peak TM. 26-46.8 2.079 Ac.  
B-Peak TM. 26-46.20 0.652 Ac.  
C-Peak TM. 26-46.19 4.59 Ac.  
D-Peak TM. 26-46.21 0.22 Ac.  
E-Sulser TM. 20-110 4.412 Ac.  
F-Kelly TM. 26-46.18 4.323 Ac.  
G-Kelly TM. 26-46.17 4.114 Ac.  
H-Johnson TM. 26-46.23 3.598 Ac.  
I-Johnson TM. 26-46.22 2.92 Ac.  
J-Holliday TM. 26-46.13 5.94 Ac.  
K-Holliday TM. 26-46.12 3.238 Ac.  
L-Kans TM. 26-46.3 5.4 Ac.  
M-Patera TM. 26-46.7 7.32 Ac.  
N-JayBee TM. 26-46.14 8.692 Ac.  
O-Pittman TM. 26-46.2 5.135 Ac.  
P-Johnson TM. 26-46.9 5 Ac.  
Q-Patera TM. 26-46.6 1.702 Ac.  
R-Patera TM. 26-46.15 3.722 Ac.  
S-JayBee TM. 26-46.16 5.094 Ac.  
T-Shrader TM. 26-46.1 5.58 Ac.  
U-Ison TM. 26-46.10 4.98 Ac.  
V-Doty TM. 26-46.5 13.14 Ac.  
W-Kans TM. 26-46.4 8.1 Ac.  
X-Walton TM. 26-46.11 6.43 Ac.  
Y-JayBee TM. 26-46.24 3.059 Ac.  
Z-JayBee TM. 26-46.19 1.496 Ac.  
KK-Weigle TM. 27-22 60.19 Ac.  
LL-Weigle TM. 27-23 61.62 Ac.

The distance between Larry 3U Top Hole and Moe 3U Top Hole is 3,222'. The distance of the Moe 3U Top Hole to Larry 3U leg is 2,087'.

400' from Bore Path  
500' from Bore Path  
Unit Boundary Line

Notes:  
Larry 3U BH is 1,957' from  
47-095-02273H BH.

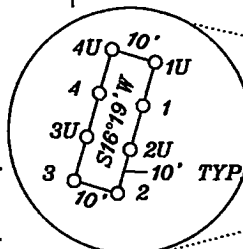
02315H

Larry 3U  
Location  
02334H184P  
(17) 899  
(25)

N.T.S.

Bottom Hole 11,336'  
LATITUDE 39-30-00 N (TH)  
LATITUDE 39-27-30 N (BH)

7 1/2'



## Lease Numbers

AA-Jay Bee Production Company  
TM 26-46 - RT2  
BB-WVDNR TM 27-5 - T6002B  
CC-WVDNR TM 27-2 - T6000E  
DD-WVDNR TM 27-5 - T6002A  
EE-WVDNR TM 27-2 - T6000A  
FF-WVDNR TM 27-2 - T6000C  
GG-WVDNR TM 27-2 - T6000D  
HH-WVDNR TM 27-4 - T6015  
II-WVDNR TM 27-28 - T6014  
JJ-WVDNR TM 27-25 - T6052

## Notes:

- All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
- Well bore path and surface hole locations are over 400' from the unit boundary.
- Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.
- No water wells were found within 250' of the well location. A house was found S64°59'W 580' from the center of the well pad. A wetlands is located 103' from LOD.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
DRAWING NO. 1  
SCALE 1" = 2000'  
MINIMUM DEGREE OF  
ACCURACY 1 in 200  
PROVEN SOURCE OF  
ELEVATION GPS  
submeter unit

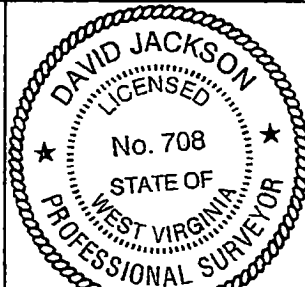
I THE UNDERSIGNED, HEREBY CERTIFY THAT  
THIS PLAT IS CORRECT TO THE BEST OF MY  
KNOWLEDGE AND BELIEF AND SHOWS ALL THE  
INFORMATION REQUIRED BY LAW AND THE RULES  
ISSUED AND PRESCRIBED BY THE DEPARTMENT  
OF ENVIRONMENTAL PROTECTION.

(SIGNED)

David L Jackson

R.P.E.

P.S. 708



STATE OF WEST VIRGINIA  
Division of Environmental Protection  
OFFICE OF OIL AND GAS

DATE July 22, 2016OPERATOR'S WELL NO. Larry 3U  
API WELL NO.

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
(IF 'GAS') PRODUCTION X STORAGE DEEP X SHALLOW  
LOCATION: ELEVATION 739.4' WATER SHED Middle Island Creek  
DISTRICT Ellsworth COUNTY Tyler  
QUADRANGLE Middlebourne 7 1/2' (TH), Shirley 7 1/2' (BH)

SURFACE OWNER Jay Bee Production Company ACREAGE 286.03 ac.  
OIL & GAS ROYALTY OWNER Ridgetop Capital LP, and Ridgetop Capital II, LP LEASE ACREAGE 286.03 ac.  
LEASE NO. RT2

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR  
STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW  
FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON CLEAN OUT AND REPLUG  
TARGET FORMATION Utica ESTIMATED DEPTH TVD = 10,615'; TMD = 18,426'  
WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda  
ADDRESS 1720 Route 22 E, Union, NJ 07083 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337



Larry 3U Leg	—
Moe 3U Leg	—
47-095-02273H	—
10,560' Offset	— — —
3,000' Offset	— — —

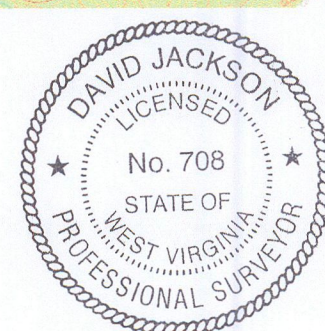
<i>Top Hole</i>	
UTM NAD 83(Meters)-	4369521.51 N, 510257.91 E
<i>Landing Point</i>	
UTM NAD 83(Meters)-	4369359.86 N, 510128.44 E
<i>Bottom Hole</i>	
UTM NAD 83(Meters)-	4367264.76 N, 510885.05 E

<i>Top Hole</i>
<i>UTM NAD 83(Meters)—4368727.33 N, 509680.64 E</i>
<i>Landing Point</i>
<i>UTM NAD 83(Meters)—4368606.71 N, 509435.13 E</i>
<i>Bottom Hole</i>
<i>UTM NAD 83(Meters)—4366452.78 N, 510178.43 E</i>

Top Hole
UTM NAD 83(Meters)-4364725 N, 511815 E
Bottom Hole
UTM NAD 83(Meters)-4366710 N, 511104 E

GRID NORTH

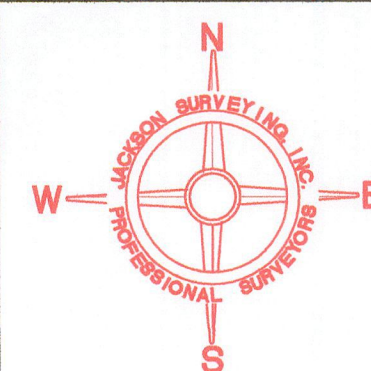
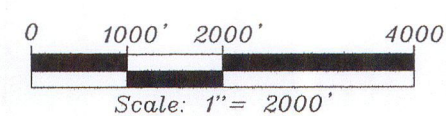
West Virginia  
State Plane  
NAD '83  
North Zone  
RTK GPS



*David L. Jackson*  
David L. Jackson P.S. 708  
Jackson Surveying, Inc.  
677 West Main Street  
Clarksburg, WV 26301  
304-623-5851



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DRILLING  
into the future



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Larry 3U  
07/22/2016  
10,560' Offset



